From:

Swope, Sheridan

Sent:

Friday, January 28, 2005 3:36 PM

To:

STIC-Biotech/ChemLib

Subject:

10/029,345

For 10/029,345, pls interference search only:

SID 108, residues 538-2532, against the NT data bases

SID 108, residues 538-1443, against the NT data bases

SID 108, full-length, oligo search (at least 1419 NTs), against the NT data bases

SID 109, full-length, against the NT & AA data bases

SID 109, residues 1-302, against the NT & AA data bases

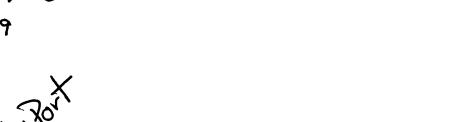
SID 109, full-length, oligo search (at least 473 AAs), against the NT & AA data bases

Sheridan Swope, Ph.D. Patent Examiner, AU 1652 Recombinant Enzymes 571-272-0943 (voice) E02B71 Remsen Bld (Office) E02C70 Remsen Bld (Mailbox)

1/2-665 1/2-302 > 473



538-2532 108: 541 - 2532 538 - 1443 541-1443 >14 19



STAFF USE ONLY

Searcher:_ Searcher Phone: 2-Date Searcher Picked up:_ Date Completed: Searcher Prep/Rev. Time:_ Online Time:_

Type of Search	
NA Sequence: #	
AA Sequence :#	_
Structure: #	_
Bibliographic:	
Litigation:	
Patent Family:	
Other:	

endors and cost where applicable
STN:
DIALOG:
QUESTEL/ORBIT:
LEXIS/NEXIS:
SEQUENCE SYSTEM:
WWW/Internet:
Other(Specify):

This Page Blank (uspto)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
               1991.8

1991.8

386.2

294.6

294.6

106.8

1106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8

106.8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Beq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued_Patents_NA:*

1: /cgn2_6/ptodata/1/ina/5A_COMB.seq:*

2: /cgn2_6/ptodata/1/ina/5B_COMB.seq:*

3: /cgn2_6/ptodata/1/ina/6A_COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*

6: /cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IDENTITY_NUC
Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-345A-108_COPY_538_2532
1995___536
1(a) ggcccatgagatgattgg......tggaaatcattgaggtctcf)1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pebruary 15, 2005, 02:21:00 ; Search time 361.039 Seconds (without alignments) 9041.598 Million cell updates/sec
                                                                                                                                                                 Copyright
               23544
23542
2351
2351
2351
2351
2379
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
22103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
20103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GenCore version 5.1.6 (c) 1993 - 2005 Compugen
       US-09-816-494-3
US-09-916-494-1
US-09-920-668-3
US-09-949-016-3250
US-09-513-999C-2877
US-09-513-999C-3684
US-09-557-921-1
US-09-949-016-4617
US-09-922-146-3
US-09-922-146-3
US-09-023-655-946
US-09-949-016-2615
US-09-023-655-347
US-09-702-705-801
US-09-702-705-801
US-09-71-125-801
US-09-7614-124B-801
US-09-7614-124B-801
US-09-7614-124B-801
US-09-7614-124B-804
US-09-7614-124B-804
US-09-7614-124B-804
US-09-7614-124B-804
US-09-7614-124B-804
US-09-614-124B-804
US-09-761-125-804
US-09-58-824-804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SUMMARIES
Sequence 3, Appli
Sequence 1, Appli
Sequence 3, Appli
Sequence 3250, Ap
Sequence 2877, Ap
Sequence 91, Appli
Sequence 1, Appli
Sequence 4617, Ap
Sequence 4617, Ap
Sequence 91, Appli
Sequence 91, Appli
Sequence 9165, Ap
Sequence 9165, Ap
Sequence 801, App
Sequence 804, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
```

US-09-671-325-825 US-09-589-184-825 US-09-588-824-825 US-09-702-705-826 US-09-776-457-856
US-09-702-705-803 US-09-736-457-803 US-09-614-124B-803 US-09-6571-325-803 US-09-589-184-803 US-09-658-824-803 US-09-702-705-825 US-09-7136-457-825 US-09-614-124B-82

```
Sequence 3, Application US/09816494
Patent No. 6664089
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUF
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
FILE REFERENCE: 10448-030002
CURRENT FILING DATE: 2001-03-23
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FAStSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1998
TYPE: DNA
ORGANISH: Homo sapiens
                               문
                                                            Ś
                                                                                               밁
                                                                                                                        8.
                                                                                                                                                              밁
                                                                                                                                                                                            S
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                  당
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 1993; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Local Similarity
                                                              301
361
                               301
                                                                                                   241
                                                                                                                                241
                                                                                                                                                                  181
                                                                                                                                                                                                   181
                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                  61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                   ᅩ
                                                                                                                                                                                                                                                                                                                                                                                    1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                             GACTGTTTTCTCACTGCTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 1991.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                   ۵
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
```

360 300

240 240 180 180 120 120 6

420 360 n

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ᅜ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                   1321
                                                                                                                                                                                                                               1261
                                                                                                                                                                                                                                                                  1261
                                                                                                                                                                                                                                                                                                         1201
                                                                                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                                                                                        1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                         GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                             AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGGAGACTCCCGGAAACCAGTCCT
                                                                                                                                                                                                                                       TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                     AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                 retergarateaarcagriticaraticagecageargecagearectracargetre
                                                                                                                                                                                                                                                                                                                 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                      AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                             AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rerecceacreraceraceaciaecaciacia de la receneración de la receneración
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ccgriggriggaciaaarcagragarricarrigagaaagcaaaagccrccaarggargrefr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           arccccaagrerearricerecererecereiaaareacaecrirreaaaaaarrire
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTATAGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGCCTGCCAGCGAGATGTCCTCAACAAGGAGGTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAATTCTTCCCAATCTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A CT CTA GT C C CTA C CT G CATTT CT CA G C CTT G C TTA C CT GT T G C CAA CATT G G G C CAA C C
                    1500
                                                         1440
                                                                                                1440
                                                                                                                                                                            1380
                                                                                                                                                                                                                                                                                             1260
                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                   1320
                                                                                                                                                                                                                                                        1320
                                                                                                                                                                                                                                                                                                                                 1260
                                                                                                                                                                                                                                                                                                                                                                        1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
              Ş
                                                     B,
                                                                                    Ś
                                                                                                                                                                                                               US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 2
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                               Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                 1993;
                                                       589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681
                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1441
                                                                                                                               Conservative
```

```
ATCATTGAGGTCTCC
                               ATCATTGAGGTCT ( 1995
                                                                                           AGGTCACGGGAAGAGCTGGGGAAAGTGGGCCAGTCAGCTTTTCGGGCAGCATCGAA
                                                                                                                                              AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                    AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                    CAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGAGCTGGCATGAAGAGAGACCCCCTTTGAA
                                                                                                                                                                                                                                                GCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                  GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                         ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                           TCGGATATCTTGGCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCACTGCATCGAAGTGGGAGCGTGGACGACAATTACCACACCAGCTTCCTTTTCGGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTCCACTGCATCGAAGTGGAGGAGGAGAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
                                                                          AGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
     1995
L 2532
                                                                        1980
                                                                                                         1980
                                                                                                                                              1920
                                                                                                                                                                                                                    1860
                                                                                                                                                                                                                                                          1860
                                                                                                                                                                                                                                                                                             1800
                                                                                                                                                                                                                                                                                                                                1800
                                                                                                                                                                                                                                                                                                                                                                     1740
                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                                                                                                                             1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1560
```

```
Sequence 1, Application US/09816494
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUF
TITLE OF INVENTION: 98692 AND 21117, NOVEL DUF
TITLE OF INVENTION: 98692 AND 21117, NOVEL DUF
TITLE OF INVENTION: 98692 AND 21117, NOVEL DUF
TITLE OF INVENTION: 030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2583)
AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                         99.8%;
99.9%;
                                                                                                                                       Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DUAL
AND U
                                                                                                                                                                             멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   USES
                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPECIFICITY
JSES THEREFOR
                                                                                                                                                                           4;
                                                                                                                                       Indels
                                                                                                                                                                         Length
                                                                                                                                                                           3544;
                                                                                                                                     <u>,</u>
                                                                                                                                   Gaps
                                                           648
```

120

0

Ó 문 Ş 밁 δ В Ś 밁 Ş В Ś 밁 Ś

OY 961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGCCCCTCAGTCCACCC	Db 649 AGTGGAACGGAAAAGTGCTGCTTATTGATAGCCGCCCATTTGTGGAATACAATACATCCACCO OY 118 GACAAAGTGTTAATTACAAGTCTCATCCAGCATTCAGCGAAGATTCAATCATCCACCO OY 118 GACAAAGTGTTAATTACAAGACCTATCAGCATTCAGCGAAACATTAGAGGTTGCAACAG OY 118 GACAAAGTGTTAATTACAGACCTATCAGCATTCAGCGAAACATTAGAGGTTGCACTGGA OY 118 GACAAAGTGTTAATTACAGACCTATCAGCATTCAGCGAAACATTAGAGGTTGCACTTGAT Db 769 GACAAAGTGTTAATTACAGACCTATCAGCATTCAGCAAACATTAGAGGTTGCACTTGAT OY 241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAGCTTCAACCTTCAACTTGAT OY 241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAGCTTCCACAGATGTTCCACTTGTTCACTTGAT Db 829 TGCATTCAGAAAGGTTGTAGTTTACGATCAAGCTTCCACAGATGTTCACCTTGTTCACCTTG OY 301 GACTGTTTCTCCACTTGTAGTTTCTCAGTTTACCTGGCCCTTGTAAACTTCAACATTCCT OY 301 CTTGCAGGTGGGTTTTCTCACTTCTCAGGTTTTCCCTTGACCTCTGTAAAGAAAAATTCC OY 301 CTTGCAGGTGGGTTTTCTCATTCTCAGGCTTTTACCTTGTTTCCCTAACAACAATTCC OY 301 CTTGCAGGTGGGTTTTCTCATTCTCAGCCTTTGTTTCCCTACACATTGAGGCCAACCTTGATACCAACTTGAAAGAAA
1020 RESULT 3 1608 ; Sequence 3, Application 5 Sequence 3, Application 6482644 1080 ; Patent NO. 6482644 1080 ; Patent NO. 6482644 1080 ; Patent NO. 1000 CONTROL ON 1000	708 Qy 1201 180 Db 1789 768 Qy 1261 240 Db 1849 828 Qy 1321 300 Db 1909 888 Qy 1381 420 Db 2029 1008 Qy 1501 480 Qy 1501 480 Qy 1501 480 Qy 1501 540 Db 2089 1128 Qy 1621 600 Db 2149 1248 Qy 1681 600 Db 2329 1308 Qy 1861 700 Db 2329 1308 Qy 1861 840 Qy 1921 900 Db 2449 1428 Qy 1921 900 Db 2509 1480 Qy 1921
on US/09920668 Weert Monia MOTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EX 10246 10246 2001-08-01 2001-08-01	TCCTCATCAGATATCAGTTTCATATTCAGCCAGCATGGCAGCATTCCTTACATGGCTTC 1

```
899
            ş
                                                                                                                                                       GAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                         TGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                               AGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                        AGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                 TCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                   ACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                        SAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                           CAGCCATCTACGGAGGCAGTGCCAGTTACTCT
            Q
            DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
                                                                                                                                                                   1860
                                                                                                     2568
                                                                                                                 1980
                                                                                                                                           1920
                                                                                                                                                                                             1800
                                                                                                                                                                                                                       1740
                                                                                                                                                                                                                                                1680
                                                                                                                                                                                                                                                                          1620
                                                                                                                                                                                                                                                                                                   1560
                                                                                                                                                                                                                                                                                                                             1500
                                                                                                                              2508
                                                                                                                                                        2448
                                                                                                                                                                                                                                                                                       2148
                                                                                                                                                                                                                                                                                                               2088
                                                                                                                                                                                                                                                                                                                                          2028
                                                                                                                                                                                                                                                                                                                                                       1440
                                                                                                                                                                                 2388
                                                                                                                                                                                                           2328
                                                                                                                                                                                                                                    2268
                                                                                                                                                                                                                                                             2208
```

```
밁
                                               S
                                                                              밁
                                                                                                                     Ś
                                                                                                                                                                  밁
                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 19.4%;
Best Local Similarity 59.9%;
Matches 716; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ORGANISM: HOMO FEATURE: NAME/KEY: CDS LOCATION: (135)
                                                                                      1005
                                                                                                                                                                945
                                                                                                                                                                                                     805
                                                                                                                                                                                                                                               885
                                                                                                                                                                                                                                                                                                                           825
                                                                                                                                                                                                                                                                                                                                                                685
                                                                                                                                                                                                                                                                                  745
                                                                                                                                                                                                                                                                                                                                                                                                       765
                                                                                                                                                                                                                                                                                                                                                                                                                                            625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           645
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        585
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                28
                                GGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAACCAGACTGGAGCATCAGGGCCAAAG
                                                                                                                                                    GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                                                             GAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCGAATTTTCTG
                                                                                                                                                                                                                                TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC
                                                                                                                                                                                                                                                         TCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                                                                                                                                                            TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC
                                                                                                                                                                                                                                                                                                                                                                                         crcaaceccaecaacrecrececaaecereaecrecarereceaeaeaececerreareee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ĠĠĊŦĊĠĊĀĠĀĀĠĠĀĊĠŦĊĊŦĀĀĀĊĀĀĠĠĀŦĊŦĠĀŦĠĀĊĠĊĀĀĀĀŤĠĠĀĀŦĀĀĠĊŦĀĊĠŦĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCTGCCAGCAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rcerderrecedecererdeciagoscandecergereceracecargadecererec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGCCTTGCTTTACCTGTTGCCAACATTGGGGCCAACCCGGAATTCTTTCCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTGGACGGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGGTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCTCCATCCTGCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAAGCTCCCAAGATGTTGCCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ĊAĠĊCGGĊTĠĊACGCAGCCAĠĠTGĠAGGCTACGGAGCCACAĠGACĠTĠĠTĠĠTCTATĠAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      récreca A de regresa de la recepción de la rec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAAAAGTGCTGCTAATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (135)...(2012)
--CCCCCTCAGGGACGCCGAGCCTCCGCCCAGTCCTGCCGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 387.8; DB 4;
Pred. No. 2.6e-119;
0; Mismatches 452;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                      1004
                                     984
                                                                                                                                                                                                                                                                       804
                                                                                                                                                                                             864
                                                                                                                                                                                                                                  944
                                                                                                                                                                                                                                                                                                              884
                                                                                                                                                                                                                                                                                                                                                                                           824
                                                                                                                                                                                                                                                                                                                                                                                                                                  684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      87
              Ś
                                                   밁
                                                                              Ś
                                                                                                                           밁
                                                                                                                                                              Ś
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local :
              388
                                                 439
                                                                                      328
                                                                                                                               379
                                                                                                                                                                  268
                                                                                                                                                                                                         319
                                                                                                                                                                                                                                               208
                                                                                                                                                                                                                                                                                      259
                                                                                                                                                                                                                                                                                                                             148
                                                                                                                                                                                                                                                                                                                                                                    199
```

```
Sequence 3250, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASS

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF

FILLE REFERENCE: CLOO1307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 50/231,498

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FRASESEQ for Windows Version 4.0

LENGTH: 2351

TYPE: DNA

ORGANISM: Human

US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 4
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Local Similarity
nes 715; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88 GATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAAC 147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            28 ATTGTTAÇTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATT 87
CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                        AAGCTGGACGGCTĞCTTCGACAGCGTGGCCATCCTCACTGGGGGCCTTCGCCACCTTCTCC
                                                                                                        AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAAGTTCTCT
                                                                                                                                                                 CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCCTCCATCCTGAGC
                                                                                                                                                                                                    CAAAGCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                            TGCTCCAAGCTGGTGAÄGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                          TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                              CAGCCGGCTGCACGCAGCCAGGTGGAGGCTACGGAGCCACAGGACGTGGTCGTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                cáccifácaagacactaaaccaccificaaagcacticitricificectagacaticaagricita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGGCTGGAAGACAACAATAAGCTCAAGCGTTCCTTCTCTGGATATCAAATCAG 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGCCCCCGGCGACCAGCACTGCAGCAGGGCCTGCGCGCCTGCACCTCTCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCAGCGTGCCCAGCGTGCAGCGTGCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCGCTGCCACGGCTGCCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCT 1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 386.2; DB 4;
Pred. No. 9.1e-119;
0; Mismatches 453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ASSOCIATED
OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2351;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                             444
                                                                          498
                                                                                                                                                                    438
                                                                                                                                                                                                                                                                378
                                                                                                                                                                                                                                                                                                               267
                                                                                                                                                                                                                 327
                                                                                                                                                                                                                                                                                                                                                                                                         207
                                                                                                                                                                                                                                                                                                                                                                                                                                                        258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1104
```

```
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Duclert, A.
APPLICANT: Discrete, A.
TITLE OF INVENTION: Expressed Sequence Tags and Enc.
Patent No. 6783961
PATENT REFERENCE: 59. US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US 60/122,487
PRIOR APPLICATION WIMBER: US 60/122,487
PRIOR PILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOPTWARE: Patent.pm
SEQ ID NO 2877
                                                                                                                                                                                                                            RESULT 5
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                     멂
                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ð
                                                                                                                                                                                    Sequence 2877, Application Patent No. 6783961 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                  1165
                                                                                                                                                                                                                                                                                                                                              1195
                                                                                                                                                                                                                                                                                                                                                                                                     1147
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1039
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            619
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          499
                                                                                                                                                                                                                                                                                                        AGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAG
                                                                                                                                                                                                                                                                                                                                                                 TCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                              GCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAAGCGTGCCCAGCGTGCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCAAACTTTCAATTTTCTG
                                                                                                                                                                                                                                                                                       CGCCTGCAGGACACTAACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTG
                                                                                                                                                                                                                                                                                                                                                ACGCCCCCGGCGACCAGCGCACTGCAGCAGGGCCTGCGGGCCTGCACCTCTCCTCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                      GC-----CAGGGAGGGCGGCCTGAGCGCGGGGGGGAGCCCCCCGCGCCCCCCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCCCGCTGCCACGGCTGCCACCACCTACCTCAGAGAGCGCTGCCACAGGGAATGCGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCA-----CCCCCTCAGGGACGCCGGAGCCTCCGCCCAGTCCTGCCGCCGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCAGCTGCTGGAGTACGAGCGCAGCCTGAAGCTGCTGGCCGCCCTGCAGGGCGACCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGCTCCGCCACCATCGCTATCGCCTACATGAAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTTTTAGTGCACTGTTTAGCTGCGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCCGCTTCATGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC
                                                                                                                                                                                                                  US/09513999C
                                                                                                                               Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                  1219
                                                                                                                                                                                                                                                                                       1309
                                                                                                                                                                                                                                                                                                                                                                         1164
                                                                                                                                                                                                                                                                                                                                                                                                      1194
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        558
                                                                                                                                                                                                                                                                                                                                              1254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      564
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                    RESULT 6
US-09-016-434-91
                                                                                                                                                                  S
                                                                                                                                                                                                   밁
                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
Sequence 91, Application US/09016434
Patent No. 6500938
GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION
```

```
; NAME/KEY: UNSURE
; LOCATION: 37
; OTHER INFORMATION:
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                     Matches 326;
                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION: 237 OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
LOCATION: 17
OTHER_INFORMATION: h=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: misc_feature
LOCATION: 237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 19
OTHER INFORMATION:
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: 18
OTHER INFORMATION: y=c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                  Local Similarity
                        332
                                                  239
                                                                                                       179
299
                                                                           272
                                                                                                                               212
                                                                                                                                                         119
                                                                                                                                                                                  152
                                                                                                                                                                                                              59
                                                                                                                                                                                                                                        93
                                                                                                                                                                                                                                                                                 34 ACTGACAGGTTGGTGGCTCTGCTGCAAAGTGGAACGG-AAAAAGTGCTGCTAATTGATAG
                                                                                                                                                                         CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                          CCGGCCATTIGTGGAATA-CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                   TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA 366
                                                  GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                    ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAA
                                                                           GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                                                                                                                                                                  ACTGAGAGGTTGGTGGHY---KCTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR
                                                                                                                                                         CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 k=g
                                                                                                                                                                                                                                                                                                                                                                                     Xaa=His
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            r=a
                                                                                                                                                                                                                                                                                                                                14.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            မ္မ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rt
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   đ
                                                                                                                                                                                                                                                                                                                                                                                     유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           õ
                                                                                                                                                                                                                                                                                                                  Score 294.6; DB 4
Pred. No. 1.6e-88;
5; Mismatches 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 e
                                                                                                                                                                                                                                                                                                                                                                                     Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           c
                                                                                                                                                                                                                                                                                                                                           DB 4;
                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                   4.
                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                        151
                                                                                                                                                                                                                                                                 58
                                                    298
                                                                           331
                                                                                                       238
                                                                                                                               271
                                                                                                                                                         178
                                                                                                                                                                                  211
                                                                                                                                                                                                              118
                                                                                                                                                                                                                                                                                           92
```

FOR

THE DETECTION OF SIGNALING

PATHWAY GENE

EXPRESSION

```
US-09-513-999C-3684/c
                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-016-434-91
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and
Patent No. 6783961
FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                Sequence 3684, Application US/09513999C Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016.474
FILING DATE: HEREWITH:
CLASSIPTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IMMEDIATE SOURCE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQUENCE CHARACTERISTICS:
LENGTH: 279 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION:
NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIBRARY: LUNGFI
CLONE: 1234795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CITY: PALO ALTO
                                                                                                                                                                                                                                                           205
                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                           145
                                                                                                                                                                                                                                                                                                                                        121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        223;
                                                                                                                                                                                                                                                                                                                                                                                                 85
                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       _
                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 223
                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 247
                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 11.2%; Score 223; DB 4; ilarity 100.0%; Pred. No. 2.2e-64; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              single
                                                                                                                                                                                                                                                                                                                    AGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  91:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PA-0002 US
                                                       Encoded Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٥,
                                                                                                                                                                                                                                                                                                                                                                                        144
                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
```

```
문
                                 Ś
                                                                  밁
                                                                                           Ś
                                                                                                                          밁
                                                                                                                                                     Ş
                                                                                                                                                                                                                                                US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             D,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; OTHER INFORMATION: k=g
US-09-513-999C-3684
                                                                                                                                                                                                                                                      TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125,416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 1830
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; CURRENT FILING DATE: 2000-02-2
PRIOR APPLICATION NUMBER: US 60
PRIOR FILING DATE: 199-02-26
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOPTWARE: Patent.pm
1 SEQ ID NO 3684
LENGTH: 378
                                                                                                                                                                                    Matches
                                                                                                                                                                                                    Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: CDS
LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
NAME/KEY: misc_feature
LOCATION: 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                 Y Match 6.2%;
Local Similarity 56.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local
521
                                                                                                                                                        461
                                                                                                                                                                                    251;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     164 AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               104 TGGAATACATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA 163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  44 TGGTGGCTCTGCTGGAAAGTGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                      TCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATA
                          CCTGTCCAAAGCCTGACTTT----ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATG
                                                        CTCAGGÁCCTGGÁCACCÁTGCÁGCGGCTGAACÁTCGGCTÁCGTCATCAACGTCÁCCACTC 1155
                                                                                                                    TCGAGAACGCTGAGCTCACCCCCATCTTGCCCTTCCTGTTCCTTGGCAATGAGCAGGATG
                                                                                                                                        TTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC 199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATAAGGTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAGGTTGAC 234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGGTGGCTCTGCTGGAAAGTGGAAAGGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2000-02-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              or
                                                                                                                                                                                   0
                                                                                                                                                                                Score 124.6; DB 4
Pred. No. 1.7e-30;
0; Mismatches 189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60/122,487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ,
,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 187.8;
Pred. No. 2.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .2e-52;
                                                                                                                                                                                                            DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 4;
                                                                                                                                                                                 189;
                                                                                                                                                                                 Indels
                                                                                                                                                                                                              Length 1830;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length 378;
                                                                                                                                                                                <u>ع</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
 1215
                                                                                         580
                                                                                                                                                  520
                             637
                                                                                                                    1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103
                                                                                                                                                                              ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
RESULT 9
US-09-949-016-4617
; Sequence 4617, App
; Patent No. 6812339
                                                         뭐
                                                                                        5
                                                                                                                               밁
                                                                                                                                                        -$
                                                                                                                                                                                              문
                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CCURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/231,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR PILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LENGTH: 2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1216
                                                                                                                                                                                                          843
                                                                                                                                                                                                                                                                                                                      535
                       772
                                                                                                                                   903
                                                                                                                                                                       652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             818
                                                         963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     638
                                                                                                                                                                                                                                                                                                                                                                                                                                229; Conservative
                                                                                                                                                                                                          TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                                                                                                                                                 AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
                                                                                                                                                                                                                                                                                                                    CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA----G 591
                                                                                                                                                                                                                                                                                                                                                                                           CCAACCCGAATTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG 534
GGATGTGTTCTAGTGCACTGTTTAGCTGGGGATCTCCCGCTCCGCCACCATCGCTATCGCC
                                                                                                                                                               AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAAT
                                                                                                                                                                                                                                             CCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAG
                                                         TGCGGGGTGCTCGTCCACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                                                                   AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTTCGAGGAAGACCTAAACAAC 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACTTCATGGGGCAGTTGCTAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCATGACTGATGCTTATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTGGGGTGTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCAACAAGCAGAACCTGCGGCAGTACTTTGAAGAGGCTTTTGAGTTCATTGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGCTTTTGTGAGAAAATTTTGCCGTTGGTTGGACAATCAGTAGATTTCATTGAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                 55.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                              Score 106.8; DB 4;
Pred. No. 2.1e-24;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2283;
                                                                                                                                                                                                                                                                                                                                                                                                                                ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THEREOF
                                                         1022
                                                                                                                                   962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1275
                                                                                                                                                                                                        902
                                                                                                                                                                                                                                             651
                                                                                                                                                                                                                                                                                 842
                                                                                                                                                                                                                                                                                                                                                         782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     697
```

```
RESULT 11
US-09-016-434-1135
                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 10
US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SEQ ID NO 3
LENGTH: 2303
TYPE: DNA
                                                                                               Sequence 1135, Ap
Patent No. 650093
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF
FILE REFERENCE: RTS-0252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 229; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 3, Appl
Patent No. 65661
                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/922,146
CURRENT FILING DATE: 2001-08-01
NUMBER OF SEQ ID NOS: 48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NAME/KEY: CDS
LOCATION: (114)...(1268)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ORGANISM: Homo sapiens
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
                                                                                                                                                                                                         1083
                                                                                                                                                                                                                                                                                1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1023
                                                                                                                                                                                                                                             832
                                                                                                                                                                                                                                                                                                                    772
                                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                                                                                                                       712
                                                                                                                                                                                                                                                                                                                                                                                                                            903
                                                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               475 CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA----G
                                                                                                                                                                                                                                                                                                                                                                                       GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCATCGCTATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAG
                                                                                                                                                                                                           AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG
                                                                                                                                                                                                                                                                              TACCTCATGCAGAAGCTCCACCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                                                                                                                                                     TGCGGGGTGCTCCACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                                                                                                                                                                                                                AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGACCTACTATATCTCCCAAACTTCCAATTTTCTGGGCCAACTCCCTGGACTATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                                         AGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG
                                                                                                                                                                                                                                                                                                                                                                                                                            AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.4%;
nilarity 55.3%;
Conservative
                                                                                                                 Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US/09922146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 106.8; DB 4;
Pred. No. 2.1e-24;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                           1136
                                                                                                                                                                                                                                             885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  885
                                                                                                                                                                                                                                                                                                                  831
                                                                                                                                                                                                                                                                                1082
                                                                                                                                                                                                                                                                                                                                                                                       771
                                                                                                                                                                                                                                                                                                                                                                                                                            962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1082
                                                                                                                                                                                                                                                                                                                                                     1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              782
```

NUMBER OF SEQUENCES: 1

ADDRESSEE:

INCYTE PHARMACEUTICALS, INC

ę

SIGNALING

3174 PORTER DRIVE

```
RESULT 12
US-09-023-655-946
; Sequence 946, Application US/09023655
; Patent No. 6607879
                                                                                                                                          δ
                                                                                                                                                                                     밁
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILLING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IMMEDIATE SOURCE:
LIBRARY: GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLONE: 91418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                     1279
                                                                                                                                                                                                                                                        1219
                                                                                                                                                                                                                                                                                                                             1159
                                                                                                                                                                                                                                                                                                                                                                                           1099 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1039
                                                                                                                                               841
                                                                                                                                                                                                     781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAGAAAAAAGACCTACT
                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              979
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
                                                                                                      ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1391
                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                         CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAAATGAAAAATCCAAC
                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGGATCTCCCGGCTCCGCCACCATCGCTATCGCTACATCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              94304
                                                                                                                                                                                                                                                  TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                       CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGGAATCTCTTTGAGAAC 1098
                                                                                                                                                                                                                                                                                                                                                         CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1135:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PA-0002 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 96.2; DB 4; Length 2109; Pred. No. 7.6e-21; 0; Mismatches 188; Indels 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ω
••
                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                       1218
                                                                                                                                                                                                                                                1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        543
```

```
Ś
                                  S
                                                                  밁
                                                                                                                               밁
                                                                                                                                                            S
                                                                                                                                                                                             문
                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                     Matches 222;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         REFERENCE/DOCKET NUMBER: PA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 946:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Cocks,
APPLICANT: Susan G
APPLICANT: Jeffrey
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WOR'D Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: CO
TITLE OF INVENTION: EX
NUMBER OF SEQUENCES: 1
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
TOPOLOGY: li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE: INCYTE PHARMACEUTICALS,
                                                                1219
                                                                                                                               1159
                                                                                                                                                                                             1099
                                                                                                                                                                                                                                                    1039 GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1098
                                    781
                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                        979
                                                                                                                                                                                                                                                                                   544 CAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                               484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                                                                                                                                                        GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAAC 1338
                                                                                                                          CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCCGGGGCAAGAACTGTGGTGTC
                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  94304
                                                                                                                                                                                                                                                                                                                 ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 91418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENBANK
                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Susan G. St
Jeffrey J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Cocks, Benjamin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                  4.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     J. Seilhamer COMPOSITION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Stuart
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     37,071
                                                                                                                                                                                                                                                                                                                                                                                  ,
,
                                                                                                                                                                                                                                                                                                                                                                                Score 96.2; DB 4;
Pred. No. 7.6e-21;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PA-0001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SD
                                                                                                                                                                                                                                                                                                                                                                                                              Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.2
                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                  ω
--
                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                             1278
                                                                                                                          1218
                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                    1038
                                                                                                                                                                                                                                                                                                                                                  543
                                                                                                                                                                                                                                                                                                                                                                                1;
```

ঠ

893

```
PATENT NO. 660/0/1
PATENT NO. 660/0/1
PATENT NOTATION:
APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
COMPOSITION FOR THE STANFORM OF THE STANFORM O
                                                                                                                                                                                                                                                                                                                                                                                           RESULT 14
US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 13
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; SEQ ID NO 2615
; LENGTH: 2475
; TYPE: DNA
; TYPE: DNA
; ORGANISM: Human
; ORGANISM: Human
                                                                                                                                                                                                                                                                                                           Sequence 347, Application US/09023655 Patent No. 6607879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
FILE REFERENCE: CLOO1307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE PESSED ID NOS: 207012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 2615, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
les 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1128 GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1068 ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        544 CAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAAATCCAAC 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4.8%;
ilarity 53.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 96.2; DB 4; Length 2475; Pred. No. 8.7e-21; 0; Mismatches 188; Indels 3
                                                                                             FOR
                                                                                             THE DETECTION OF BLOOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ω
•
                                                                                    CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
```

APPLICANT: APPLICANT: APPLICANT: APPLICANT:

Fanger, Gary Vedvick, Tom Bangur, Chaitan Lodes, Michael

Chaitanya

ŝ

APPLICANT:

APPLICANT:

Carter, Darrick Retter, Marc Mannion, Jane

```
S
                                                                                                                                                                                                   문
                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                 RESULT 15
US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFAX: (650) ...
INFORMATION FOR SEQ ID NO: 347
SEQUENCE CHARACTERISTICS:
FRIGTH: 1208 base pairs
                 GENERAL
                             Sequence 801, App
Patent No. 650401
                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-(
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEFAX: (650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LIBRARY: THYRN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATTORNEY/AGENT INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 3174 PO
CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: INCYTE PHARMACEUTICALS, STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ZIP: 94304
                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                 INFORMATION:
                                                                                                                                                                     860 TTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                                                                                    124
                                                                                                                                                                                                                          800 TAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATT
                                                                                                                                                                                                                                                                                                                                                                                                           142;
                                                                                                                                     184
                                                                                                                                                                                                                                                                                                     740 GGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTT 799
                                                                                                                                                                                                                                                                                                                                                                          680 TAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTG
                                                                                                                                                                                                                                                                       64 GGGTGTCCCGCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCA
                                                                                                                                                                                                                                                                                                                                          4 TTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGGCTTCTCATCCACTGCCAGGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7: THYRNOT03
                                                                                                                                  TCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                    TGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CALIFORNIA
Wang, Tongtong
                                               Application US/09702705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                                                                         4.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1508
                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PA-0001 US
                                                                                                                                                                                                                                                                                                                                                                                                                         Score 94.6; DB 4;
Pred. No. 1.7e-20;
                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                         79;
                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 1208;
                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                        859
                                                                                                                                                                                                      183
                                                                                                                                                                                                                                                                       123
                                                                                                                                                                                                                                                                                                                                          63
```

```
; APPLICANT: Fan, Liqun
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
; TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 2.10121.478C14
; CURRENT APPLICATION NUMBER: US/09/702,705
; CURRENT FILING DATE: 2000-10-30
; NUMBER OF SEQ ID NOS: 183
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO 801
; LENGTH: 1619
; TYDE: DNA
; ORGANISM: Homo sapien
US-09-702-705-801
Search completed: February 15, 2005, 11:51:06 Job time : 363.039 secs
                                                                                              Ş
                                                                                                                           ф
                                                                                                                                                                    Ś
                                                                                                                                                                                                 유 성
                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                            8 B
                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match 4.7
Best Local Similarity 52.3
Matches 232; Conservative
                                                                                                                                          677
                                                                      737
                                                                                                                                                                           844
                                                                                                                                                                                                              617
                                                                                                                                                                                                                                                                                   557
                                                                                                                                                                                                                                                                                                                                                       497
                                                                                                                                                                                                                                                                                                                                                                                          664
                                                                                                                                                                                                                                                                                                                                                                                                                           437
                                                                                                                                                                                                                                                                                                                                                                                                                                                              604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            380 GCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACC---ACTTTGAA 436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    544 CAGAATGGGATTGGTTAATGTGTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 603
                                                                                                     904 ACTGGAGCATCAGGGCCAAAGAGC 927
                                                                                                                                                                                                                                                784
                                                                                                                                                                                                                                                                                                                    724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484 ATTCTTCCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                  TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAACCAG 903
                                                                                                                                                                                                                                                                                                     GTGCACTGTTTAGCTGGGATCTCCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAG
                                                                                                                                                                                                                                                                                                                                                                                 TGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTTTCTA 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCTTCCCTTCCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATGCTGGAC
                                                                      TCCTGTGCTGCGGAGGCTGCTAGC
                                                                                                                                      TCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTGGCCACG
                                                                                                                                                                                                           AAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGCATTATC
                                                                                                                                                                                                                                            GTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTGATGATG
                                                                                                                                                                                                                                                                                                                                                 TGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGCGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                         GGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATCAGCTCC 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4.7%; Score 93.6; DB 4; Length 1619; 52.3%; Pred. No. 4.6e-20; ative 0; Mismatches 209; Indels 3
                                                                      760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                               616
                                                                                                                                                                                                                                                                                                                                                   556
                                                                                                                                                                                                                                                                                                                                                                                                                                                           663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                379
                                                                                                                                                                                                           676
                                                                                                                                                                                                                                                                                                                783
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB seq length: 0
DB seq length: 2000000000
                                 1991.8
1991.8
1991.8
1991.8
1991.8
1991.8
1991.8
1991.8
1991.8
                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Published Applications NA:*

1: /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/US08_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US08_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/US09P_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/US09P_PUBCOMB.seq:*

11: /cgn2_6/ptodata/1/pubpna/US09P_PUBCOMB.seq:*

12: /cgn2_6/ptodata/1/pubpna/US09P_PUBCOMB.seq:*

13: /cgn2_6/ptodata/1/pubpna/US09P_PUBCOMB.seq:*

14: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

15: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

16: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

17: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

18: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/US10P_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                      Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-108_COPY_538_2532
1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              February 15, 2005, 10:38:29 ; Search time 1217.22 Seconds (without alignments) 9670.754 Million cell updates/sec
                                 atggcccatgagatgattgg.....tggaaatcattgaggtctcc 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Copyright
                                                                                                                                                                                                                                                                                                      Length
          1998
1998
1998
3059
3496
3521
3544
3624
3766
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
  9 US-09-816-494-3
17 US-10-377-072-27
18 US-10-377-072-27
17 US-10-257-026-1
19 US-09-964-277-1
18 US-10-370-7158-261
19 US-09-816-494-1
17 US-10-377-072-25
18 US-10-377-072-25
17 US-10-425-114-66234
17 US-10-343-357-17
                                                                                                                                                                                                                                                                                                            BB
                                                                                                                                                                                                                                                                                                         ij
                                                                                                                                                                                                                                                                                                                                                                                 SUMMARIES
Sequence 3, Appli
Sequence 27, Appl
Sequence 27, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 261, Appli
Sequence 27, Appli
Sequence 25, Appli
Sequence 25, Appli
Sequence 25, Appli
Sequence 25, Appli
Sequence 27, Appli
                                                                                                                                                                                                                                                                                                      Description
```

	ი	a					G	a	ი	a																						
44 45	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
395.4 382	399.2	•	•	410.2	•	•	•	415.2	•	•	٠		•	•	•	•	•	•	•	1991.8	•			•	•	•		•	•	•		
19.8 19.1							0	0	٥.	0	4.		'n	œ	٩	٩	٩	٩	9	99.8	9	9	9	٩	9.	9.	9	9	9		9	
427 2453		0	461	σ	6	418	467	467	467	425	1916	3332	2200	2071	96	5	2732	14	14	14	14	14	5145	14	5145	5145	5145	5145	5145	5145	ш	79
18	18	18	18	18	18	18	18	18	18	18			17	17	17	17	17	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
US-10-357-930-10878 US-10-005-858-1	-10-357-930-3207	-10-357-930-	-10-357-930-	0-357-930-	-10-357-930-	-10-357-930-	0-357-	-10-357-930-4086	0-357-930-	-10-357-930-107	-10-108-260	09-964-277-2	-10-072-012	-10-072-	-10-296,-115	-10-094-749	-10-168-506-	-10-357-930-2867	-10-357-930-2714	-10-357-930-	0-357-930-2	-10-357-930-2691	-10-357-930-26	-10-357-930-2666	-10-357-930-	-10-357-930	US-10-357-930-21303	0-357-930-2	US-10-357-930-21071	US-10-357-930-20969	-10-357-930-20	US-10-648-593-115
Sequence 10878, A Sequence 1, Appli	e 32077,	e 10898,	e 41346,	41000,	32416,	e 11243,	e 41017,	e 40868,	е 31909,	e 10717,	e 2429,	20, Ag	255,	257.,	520,	equence 67:	equence 2,	equence 280	27	27:	26		e 268	e 266	e 228	e 213	e 213	e 210	e 210	e 209	e 208	Sequence 115, Ap

ALIGNMENTS

```
Sequence 3, Application US/09816494
Patent NO. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUJ
TITLE OF INVENTION: PHOSPHATASE MOLECULES ANI
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
S
                                   밁
                                                                    Ś
                                                                                                              밁
                                                                                                                                               S
                                                                                                                                                                                                                                                                  US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-816-494-3
                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 1993; Conser
                                                                                                                                                                                                                                                                                                                                         SOFTWARE: 1
SEQ ID NO 3
                                                                                                                                                                                                                                                                                 LENGTH: 1998
TYPE: DNA
ORGANISM: Homo F
 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                           61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                       13
                                                                                                                                  1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                            FastSEQ for Windows Version 4.0
                                   AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                       99.8%;
                                                                                                                                                                                       Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                            B
                                                                                                                                                                                       2)
•
                                                                                                                                                                                       Indels 0;
                                                                                                                                                                                                                          Length 1998;
                                                                                                                                                                                       Gaps
                                     120
                                                                                                                60
 180
                                                                                                                                                                                       0
```

961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAGGCAGGACGCCCTCAGTCCACCC 1020	ATATCTCCAAACTTCAA	781 AGAGGATGGACATTTAGATGAGATGTGTATGAAAGCCTTCCAATGGATGTGTT 780 781 AGAGGGATGGACATTTGAGATGATGAGAGGCTTCCAATGGATGTGTT 780 781 AAGAGGATGCACTTTAGATGAATCTTCCCGCCTCCGCCACCATCGCTACATCATCATCATCATCATCATCATCATCATCATCATC	81 C - 01 A	301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360 [
RESULT 2 US-10-377-072-27 Sequence 27, Application US/10377072 Publication No. US20040009501A1 GENERAL INFORMATION: APPLICANT: Millennium Pharmaceuticals Inc. APPLICANT: Logan, Thomas Joseph APPLICANT: Logan, Thomas Joseph APPLICANT: Millenson, Mark J. APPLICANT: Willenson, Mark J. APPLICANT: Rudolph-Owen, Laura A. APPLICANT: Tsai, Fong-Ying APPLICANT: Tsai, Fong-Ying TITLE OF INVENTION: ANDUSES THEREFOR FILE REFERENCE: MPI03-0180MNIM	AGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA	1741 1801 1801 1801 1861		1381 GA 1381 GA 1381 GA 1441 AG 1441 AG 1501 TC	1201 1261 1261 1321

Ś 밁 **8 B 8**

B 8 B 8

유정

皮 Ś 유성

밁 Ś 밁 Ś 밁 S 뭐 ঠ В Ş

음 성 밁 δ

유 성 유 성 유

8 밁

```
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILLING DATE: 2001-06-29
PRIOR PILLING DATE: 2000-06-29
PRIOR PILLING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR FILLING DATE: 2000-011-28
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILLING DATE: 2000-04-26
PRIOR PILLING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILLING DATE: 2000-05-19
PRIOR PILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILLING DATE: 2001-03-22
Remaining Prior Application data removed - Set NUMBER: US 09/815,419
PRIOR APPLICATION N
   음 성
                                               밁
                                                                            ঠ 🖁 ঠ
                                                                                                                                                                           밁
                                                                                                                                                                                                      중 유
                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                               ર્
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      ર્
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 99.8%;
Best Local Similarity 99.9%;
Matches 1993; Conservative
481
                                                                                                                                                                            301
                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                               181
                   481
                                                          421
                                                                                                                  361
                                                                                                                                               361
                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ь
                                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCCATGAGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
 540
                             540
                                                          480
                                                                                       480
                                                                                                                    420
                                                                                                                                               420
                                                                                                                                                                            360
                                                                                                                                                                                                         360
                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                    S
                                                                                           S
                                                                                                                                                     S
                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                        ঠ
                                                                      밁
                                                                                                                        밁
                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                1561
                                                                       1501
                                                                                                                                  1441
                                                                                                                                                             1441
                                                                                                                                                                                         1381
                                                                                                                                                                                                                      1381
                                                                                                                                                                                                                                                   1321
                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                        1261
                                                                                                                                                                                                                                                                                                                                                                      1201
                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1021
                                                                                                    1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                       AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                           TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                      AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                               AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                           GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCGCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                            GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                  AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                          1620
                                                                                                    1560
                                                                                                                                  1500
                                                                                                                                                               1500
                1620
                                                                       1560
                                                                                                                                                                                            1440
                                                                                                                                                                                                                       1440
                                                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                                                                1380
                                                                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                                                                        1320
                                                                                                                                                                                                                                                                                                                                                                       1260
                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                 1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              780
```

```
CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-01-28
PRIOR PRILING DATE: 2000-01-28
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2000-04-26
PRIOR PRILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                Remaining Prior Application data
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Ver
SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 27, Application US/10377072
Publication No. US20040157221A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Meyers, Rachel E. Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGACCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Curtis, Rory A.J.
Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGGATATCTTGGCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Glucksmann, Maria A.
                              Windows Version 4.0
                                                              removed
                                                            See
                                                         File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND 49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 1998
; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1) ... (1998)
US-10-377-072-27
                                        밁
                                                                   Ś
                                                                                                   吊
                                                                                                                                 Ś
                                                                                                                                                                   밁
                                                                                                                                                                                           5
                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 1993; Conserv
        901
                                        841
                                                                     841
                                                                                                     781
                                                                                                                                   781
                                                                                                                                                                   721
                                                                                                                                                                                                  721
                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181 GACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Н
CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                              AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAAGACCTACT
                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                             CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                    CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAACGAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTIACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            recaercaeaaeerreraerraecearcaaaecreceaaearerrecerererea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1991.8;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
   960
                                                              900
                                                                                                                                                                                            780
                                                                                                840
                                                                                                                            840
                                                                                                                                                            780
                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
1321
                      1981
                                                                                                                                                                                                                                                                              1741
                                                                                                                                                                                                                                                                                                                                                    1681
                                                                                                                                                                                                                                                                                                                                                                                        1681
                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                961
                                                                                                                                                                                                                                                                                                  GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCCG 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCCACCC 1020
ATCATTGAGGTCTCC
                                                                                                                                                                                                                                  CAGAAGCCAAGTGACAGAGCTGACTCGCGGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA 1860
                                                                                                                                                                                                                                                                                                                                                                     ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCCACTGCATGGAAGTGGGAGGGGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                        AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                     CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCCTGGCCTTGGGCCTTAAGGGCTGGCAC 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGCTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200
                                                                                                                               AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                            GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                               TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC 1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                          AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                            TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                    1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1500
                                                         1980
                                                                                                                                                                 1920
                                                                                                                                                                                                                                                                                                                                                    1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1080
                                                                                                                                                                                                                                                                            1800
                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4

US-10-257-026-1

; Sequence 1, Application US/10257026

; Publication No. US20040086859A1

; GENERAL INFORMATION:

; APPLICANT: Mexck Patent GmbH

; TITLE OF INVENTION: New dual specificity phosphatase

; FILE REFERENCE: DUSP10KDWS

; CURRENT APPLICATION NUMBER: US/10/257,026

; CURRENT APPLICATION NUMBER: US/10/257,026

; CURRENT FILING DATE: 2003-11-07

; NUMBER OF SEQ ID NOS: 3

; SOFTWARE: PatentIn Ver. 2.1
Ś
                                    밁
                                                                  5
                                                                                                            밁
                                                                                                                                     ঠ
                                                                                                                                                                         밁
                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 3059
TYPE: DNA
ORGANISM: Homo &
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: CDS
LOCATION: (127)..(2121)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1981 ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                           547
                                                                        601
                                                                                                              667
                                                                                                                                                                                  607
                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                 487
                                                                                                                                                                                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      187
   661
                                      727
                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATACAATACATCC
                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAATTTTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT 726
                                                                                                                                 CAGCAGAATGGGATTGGTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                    CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCAACTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                           ACTOTAGTOCOTACOTGCATTTOTCAGCOTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           BG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                  600
                                                                                                                                                                                    666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               186
                                                                                                                                                                                                                                                           909
                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                   546
                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                           486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      246
```

음 중

음 성 음 성

유 성

8 8 8 8

হ ৪ হ

음 중

음 중 음 중

8 8 8 8 8

중 유

B & B & B

음 성

8 8 8 8 8 8

									,	• •	0 1	0 -	. 0	~ (, <	0 ~	σ
1807 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 1866 1741 GCCTACAGCTGCAGCCAGCTGCCCACTTGCCGAAGCCAAGTCTATTCTGTGCGCAGGCGG 1800	1621 TOGGAFATCTTGGCCCCCAGACCTCTACCCCTTGCCCTGACCAGCAGCTGGTATTTTGCC 1680	1501 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 1560	1441 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500	1381 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440 	1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380	1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320 	1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260	1141 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAAGCAATAAGCTCAAGCGTTCCTTC 1200 	1081 CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACGAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTCCACCC 1020 	1027 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960				721 CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCGCCACCATCGCCTATCGCCTACATCATG 780	
Db 93 Qy 43 Db 98	Db 81	Qy 1 Db 7		ФУ 6	Q γ 5	Query Mat Best Loca Matches 1	; TYPE: I ; ORGANIS US-09-964-2	; NUMBER (; SOFTWARI ; SEQ ID NO ; LENGTH;	; TITLE O; ; FILE RE; ; CURRENT ; CURRENT	; Patent N ; GENERAL ; APPLICA ; APPLICA	RESULT 5 US-09-964-		Db 2		ОУ 1	Db 1	Db 1

Ś 밁 S 뮍 Ş 片 δ 밁 Ś 멍 Ş 뫄 δ 뭐 Ś 뫄 Ş 뭐 δ В Ś 밁 S 밁 Ś 밁 S

```
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ence 1, Application US/09964277
int No. US20020137170A1
RAL IMPORMATION:
JICANT: Luche, Ralf M.
JICANT: Weil Bo
JE OF INVESTION: DSP-16 DUAL-SPECIFICITY
REFERENCE: 200125.434
REFERENCE: 200125.434
REPLICATION NUMBER: US/09/964,277
RENT APPLICATION NUMBER: US/09/964,277
RENT FILING DATE: 2001-09-25
RER OF SEQ ID NOS: 22
PARE: FastSEQ for Windows Version 4.0
UNO 1
UNO 1
UNO 1
US/09964277
                982
                                                                                                                                       922
                                                                                                                                                                                                                                                               862
                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                atch 99.8%; Score 1991.8; al Similarity 99.9%; Pred. No. 0; 1993; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2047
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1927
                                                                        421
                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                         802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
ISM: Homo sapiens
-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1987
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1867 GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTITGGAAGCCATTAATAICAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
   ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                    ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                       crrecaderide drineric rerective drineride de concreta de la companya del companya de la companya de la companya del companya de la companya del companya de la companya de la companya de la companya de la companya del companya de la companya del companya de la companya de la companya de la companya del companya de la companya de la companya de la companya de la com
                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                         GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 3496;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
1041
                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                           480
                                                                                                                          981
                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                      420
                                                                                                                                                                                                                                                     921
                                                                                                                                                                                                                                                                                                                                                                               861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1926
```

01 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 156
1441 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
1381 GATAAGGAGGAAGCCAGCCTCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1440
1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380
261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCG
1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260
141 AGTGGGCTGCACCTGTCCGCAC
081 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 11
1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080
961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020
901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCACCTGGAGAAGCCAAAT 960
841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAG 900
81 AAGAGGATGGACATGTCTTT
21 CTAGTG
61 CCGTGGTTGGACAAATCAGT
601 ATCCCCGAGTCTCATTTCCTGCGTGTGGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
541 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600
81 CGAATTCTTCCCAATCTT

ঠ

멼

음 성 음

ક 문 δ 몽 ঠ 밁 ঠ 밁 5 밁 ঠ 밁 श् 밁 ঠ 밁 ঠ 문 ঠ 밁 δ 몽 ર્ફ 문 δ 문 Ş 밁 8 밁

```
Patin Docket Preview
APPLICANT: BODARY, SARAH C.
APPLICANT: CLARK, HILLARY
APPLICANT: BRISDELL, HUNTE
APPLICANT: BRISDELL, HUNTE
APPLICANT: JACKMAN, JANET
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WOOD, WILLIAM I.
APPLICANT: WIJTHOWAS D.
TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT PILING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
SEQ ID NO 261
LENGTH: 3521
              Ş
                                        문
                                                              5
                                                                                               밁
                                                                                                                  5
                                                                                                                                                                                                         ; TYPE: DNA; Homo sapien US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 261, Application US/10370715B Publication No. US20040258678A1 GENERAL INFORMATION:
                                                                                                                                                   Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                 121
                                            624
                                                                                                 564
                                                                    61
                                                                                                                           \vdash
CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                               ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGGGGCTGGCATGAAGAGAGACCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCCGGCCATTTGTGGGAATACAATACATCC
                                                                                               ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAGTCTAGCTTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCGGATATCTTGGCCCCCCAGACCTCTACCCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTCACGGGAAGACCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                   99.8%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2556
                                                                                                                                                   Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                    0,
                                                                                                                                                                                 DB
                                                                                                                                                    2
                                                                                                                                                                                 18;
                                                                                                                                                                               Length
                                                                                                                                                                                 3521;
                                                                                                                                                      0
                                                                                                                                                      Gaps
                  180
                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1620
                                            683
                                                                                                 623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2181
```

B

B Q B Q B Q P Q

961 GAACCTGTCCCTGCTGTCTCAGAGGGTTGACAGAAAAGCGACACGCCCTCAGTCCACCC 1020	301 GACTGTTTTCTCACTGTACTTCTGGGTTAAACTGCAAAATGTTCCACTTCTCTCTC	684 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 743 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240
WESULT 7 US-09-816-494-1 i Sequence 1, Application US/09816494 Patent No. US20020034807A1 i GENERAL INFORMATION: APPLICANT: Meyers, Rachel A. TITLE OF INVENTION: BA692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: HOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002 CURRENT APPLICATION NUMBER: US/09/816,494 CURRENT FILING DATE: 2001-03-23 PRIOR RILING DATE: 2000-03-24 NUMBER OF SEQ ID NOS: 10 SEQ ID NO 1 SEQ ID NO 1 LENGTH: 3544 TYPE: DNA ORGANISM: Homo sapiens	Db 1884 AAGCTÁTOCCCAGACTCCCCAAGAACCTATCCGAGACCCAGACCCAGCAGCCCTTCAGACCAGCCAG	QY 1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320

성 음 성

14 15	Qy 781 AGAGGATGGACATGTCTTTAGATGAAGATTTGTGAAAGAAA	721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTAC	QY 661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720	10	Qy 541 CAGCAGAATGGGATTGGTTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600	Qy 481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540	Qy 421 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480	Qy 361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 420	Qy 301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360 [Qy 241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240	Qy 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	Qy 61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTG	Query Match 99.8%; Score 1991.8; DB 9; Length 3544; Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	; PEATURE: ; NAME/KEY: CDS ; LOCATION: (589)(2583) US-09-816-494-1
B Q	Db Qy	& & &	;) B Q	B &	}	\$ B 8	}	₽ €	?	5 A	유 성	B 8	, B &	B 8	Qy dd
ATCATTGAGGTCTCC 1995 ATCATTGAGGTCTCC 2583		1861 AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC 1920	GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCCAAGTCTATTCTGTGCGCAGGCGGGCTAAGACCAAGTCTATTCTGTGCGCAGGCGGGCCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGGCCTACAAGTCTATTCTGTGCGCAGGCGGGCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG	ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT	TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC	TOTAL NATIONAL CARGO AGO AND A CARGO AGO AGO AGO AGO AGO AGO AGO AGO AGO A	TCTCCACTECATICAAAGIGAAAAGIGAAAAAATIACCAACACACCTTCTTTTCGGC TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTTCCTTTTTCGGC TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACACA	AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGGACCCCCAGAGGTCCCTTTTA 15	GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG	AGGETATIGCCAGTTCTCCCCTGTTCAGGAACTATTCGGAGCAGACTCCCGAAACCAGTCCTC	TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC	1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260	AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC	CCCAGCGTGCCAGCGTGCAGCCGTCGTTACAGGACAGCCCCTGCTACAGGCGCTCC	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020

QY 241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATTAAGGTTGACATTGAT 240	QY 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	QY 61 AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACAATC 120	Qy 1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGCAGA 60	Query Match 99.8%; Score 1991.8; DB 17; Length 3544; Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	; NAME/KEY: CDS ; LOCATION: (589)(2586) US-10-377-072-25	LENGTH: 3544 ; LENGTH: 3544 ; TYPE: DNA ; ORGANISM: Homo Sapiens	E GE	PRIOR PRIOR PRIOR PRIOR	PRIOR APPLICATION NUMBER: U PRIOR FILING DATE: 2001-05- PRIOR APPLICATION NUMBER: U PRIOR FILING DATE: 2000-06-	PRIOR APPLICATION NUMBER: US 09/843,297 PRIOR FILING DATE: 2001-04-25 PRIOR PPLICATION NUMBER: US 60/199,801 PRIOR FILING DATE: 2000-04-26		PRIOR A PRIOR A PRIOR A PRIOR A PRIOR A	APPLICATION NUMBER: US/10/377,0	T. TRUETTON: NOVEL 25869, 25934, 26335, 50365, 21117,	: Logan, Thomas : Glucksmann, Ma : Meyers, Rachel : Williamson, Ma	ORMATION Millenn Curtis	8 377-072-25 ence 25, App
Qy 1321 AAGO	Qy 1261 TCC1 Db 1849 TCC1	Qy 1201 TCTO Db 1789 TCTO		Db 1669 CCC	Qy 1021 TGT Db 1609 TGT	Qy 961 GAA Db 1549 GAA	Qy 901 CAG Db 1489 CAG	Qy 841 ATA Db 1429 ATA	781 1369	Qy 721 CTA Db 1309 CTA	661 1249	Qy 601 ATC 	Qy 541 CAC Db 1129 CAC	Oy 481 CGJ 	Qy 421 AC Db 1009 AC	Qy 361 CT 	Qy 301 GA Db 889 GA	Db 829 TG
AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1380	TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320 	TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260	AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200	CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140	TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCCGCCAGCGTG 1080	GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020	CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960	ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900	AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780	CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720	ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660	CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600 	481 CGAAITCTTCCCAAICTTIAICTTGGCIGCCAGCGAGAIGTCCTCAACAAGGAGCIGATA 540	421 ACTETAGTECCTACCTGCATTTETCAGECTTGCTTACCTGTTGCCAACATTGGGCCAACE 480	361 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC 420	GACTGITTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360	

```
RESULT 9
US-10-377-072-25
; Sequence 25, Application US/10377072
; Publication No. US20040157221A9
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceuticals Inc.
; APPLICANT: Curtis, Rory A.J.
; APPLICANT: Logan, Thomas Joseph
; APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Mackel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
ITITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
ITITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
ITITLE OF INVENTION: AND USES THEREFOR
ITITLE OF INVENTION: MINDER: US/10/377,072
CURRENT APPLICATION NUMBER: US/01/377,072
CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 60/215,370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1969
                                                                                                                                                                                                                                                                                                     Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGGATATCTTGGCCCCCAGACCTCTACCCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1968
                                           δ
                                                                                             밁
                                                                                                                              S
                                                                                                                                                                              밁
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        よ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                . B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:

; FEATURE:

; LOCATION: (589)...(2586)

US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILLING DATE: 2000-03-07
PRIOR PPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILLING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILLING DATE: 2001-05-21
PRIOR PILLING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFINGER 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches 1993;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match 99.8%;
Best Local Similarity 99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 3544
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
               1189
                                                                                               1129
                                                                                                                                                                                                                                                                1009
                                                                                                                                                                                1069
                                                      601
                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                   949
                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                    889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FastSEQ for Windows Version 4.0
               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                             CAGCAGAATGGGATTGGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                         CAGCAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGGTTCTCTCGTTGTTTTCCCCTGGCCTCTGTGAAGGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGCCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1991.8;
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 3544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
                                                    660
             1248
                                                                                             1188
                                                                                                                                                                                1128
                                                                                                                                                                                                                                                                1068
                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                 1008
                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    888
                                                                                                                                                                                                                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
```

음 & 밁 ঠ 문 ક 밁 श् 문 ঠ 밁 ş 뭐 S 밁 S 밁 S 밁 ð 밁 8 맑

124 CONTOUTIONACAMITCANTITANTITANTITANAMACCITICAMITCANTONITOTIT 720 124 CONTOUTIONACIONATITANTITANTITANAMACCITICAMITCANTONITOTIT 720 124 CONTOUTIONACITANTITANTITANTITANAMACCITICAMITCANTONITOTIT 720 125 INITIALII III III III III III III III III II													•	•	• •			0 \
COURTETTICACIANTCACTIONALITICALTICADAMACCINACIONALITIC	26	20	56 14	0 5	1441 2029	φ ω	90	84	78	14 72	.6	60	54	90	4 8	6 8	0 N	-24
GETTGANCAMITCAGTACAMITCAGTACAMAGCANAAGCCTTCOAMTGGANTGGATTCTTT 720 GETTGACCAMITCAGTACAMITCAGTACCACAMAGCCTTCAAMTGGANTGGATTCTTT 720 GETTGACTGTTTAGCTGGATCTCCCGCCCCCCCCCCCCCC	∂ <i>-</i> -6	TCGGA:	CTTTC	TCTCC	AGCAA AGCAA	GATAA GATAA	AAGCT AAGCT	0-0			0-0			- ,				0-0
TT 1308 TT 1308 TT 1308 TT 1308 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1788 CT 1140 CT 1200 CT 1320 CT 1320 CT 1380 CT 138	FICCIO 	PATCTTO	ZA I	ACTGCA ACTGCA	GCGATT GCGATT	GGAGGA GGAGGA	ATGCCA ATGCCA	ATCAGA ATCAGA	GGATA1	GCTGC	CGTGC	CCGACTO	CIGICO 	CTGGAG CTGGAG	CTCCAA	GGATGG GGATGG	TGCACT	GGTTGG
TT 1308 TT 1308 TT 1308 TT 1308 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1788 CT 1140 CT 1200 CT 1320 CT 1320 CT 1380 CT 138	CACTTO	3GCCCC	CCAGCA	rcgaag rcgaag	GCATTC GCATTC	AGCCAG AGCCAG	GTTCTC	AGATGO AGATGO	CAAATC	CCTGTC	CAGCG	TIGCTA	CIGCIG	CATCAG CATCAG	ACTTCA ACTTCA	ACATGT ACATGT	GTTTAG	ACAAAT ACAAAT
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	TACTC	CAGAC	GCACCT	TGGGAG TGGGAG	GGTCAG GGTCAG	CATCCC	CCCTGT	TTTGG	AGTTTO	CGCAG	recaeco	CCTCAG	TCTCAG	GGCCAA GCCAA	ATTTTC	CTTTAG	CTGGGA CTGGGA	CAGTAC
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	GCCTC2	CTCTAC	CACGAA CACGAA	CGTGGA CGTGGA	AACCAG AACCAG	CAAGAA CAAGAA	TCAGGA	ATACTA ATACTA	ATATTO	CAGGCT		AGGCAG	AGGGTG AGGGTG	AGAGCA AGAGCA	TGGGCC	ATGAAG ATGAAG	TCTCCC	ATTTCA ATTTCA
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	AGCCATO	CCCTTC	GTCTGC	GGACAA GGACAA	CAGCAG CAGCAG	GCTGCA	ACTATO	CAAACC	:AGCCAG :AGCCAG	rggaag <i>i</i> 	TGTTAGJ	CAGGACI CAGGACI	GACAGA GACAGA	AACTCA	AACTCC AACTCC	CTTACA	GCTCCG	TTGAGA TTGAGA
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	TACGGI TACGGI	CTGAC	reeccro	TTACCA	TGGCAC 	GACCGC	GGAGCA	TTCCAC	CATGGC	CAGCAA CAGCAA	AGGACAC AGGACAC	AAAGGCC	AAAGCGJ AAAGCGJ	AGCTGC	TGGACT.	GATTIG GATTIG	CCACCA	AAGCAA AAGCAA
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	GGCAGT	AGCAGC	3GGCCTT	CACCAGO CACCAGO	CGCCCAC	CAGGCC	GACTCO GACTCO	TACTCT	AGCATC	TAAGCT	CCCGCT	CGTGCA	AGACGCC	recacci	ATGAGAJ ATGAGAJ	TGAAAGI GAAAGI	TCGCTA	AAGCCT AAGCCT
TT 1308 TT 1308 TT 1308 TG 1368 TG 1368 CT 1428 CT 1428 CT 1548 CT 1548 CT 1548 CT 1568 CT 1140 CT 1200 CT 1140 CT 1200 CT 1200 CT 1320 CT 1388 CT 1388 CT 1388 CT 1568 CT 156	GCCAGT		AAGGGC	TICCII	AAGGTCC	TTCAGA(CGAAAC CGAAAC	GGATGG	CTTACA	CAAGCG []]]]	GGTACA		CCTCAG	GGAGAA	AGAAGAI AGAAGAI	1	TCGCCT/	CCAATG CCAATG
T 720 T 1308 G 780 G 780 G 780 G 1368 G 1368 G 1488 G 1428 C 1548 C 1548 C 1548 C 1548 C 1548 C 1568	TACTCT	TTTGCC	8=8	TTCGGC	CTTTTA	AGCCAC	CAGTCCI	GACCAA	TGGCTT	TTCCTT	GGCGCT	CAGCGT	TCCACC		79 — 7s	ACCTAC ACCTAC	ACATCAI	SATGTG:
3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	174 232	168	20	156 214	208	144 202	138 196	132 190	126 184	120 178	114 172		160	960 154	900 148	F 840	3 78 3 13	72 13
										 ,								
D D D D D D D D D D D D D D D D D D D	로 상 분	8 B	8 B	\$ B	\$ B	. Qy	US-1 Qu Be				~ ~ · · ·	 	RESI US-:	B &	, B &) B &	P &	\$ B &

유

밁 S 片 Ś 밁 S 뭐 δ 밁 S 밁 8 밁 δ 밁 S 닭 Ś 밁

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:

APPLICANT: Liu, Jingdong

APPLICANT: Liu, Jingdong

APPLICANT: Covalic, David K.

APPLICANT: Kovalic, David K.

APPLICANT: Screen, Steven E

APPLICANT: Tabaska, Jack E

APPLICANT: Tabaska, Jack E

APPLICANT: Tabaska, Jack E

APPLICANT: Covalic, David Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

FILE REFERENCE: 38-21(53313) B

CURRENT APPLICATION NUMBER: US/10/425,114

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 73128

SEQ ID NO 26234

LENGTH: 3625

TYPE: DNA

ODCANTION. USAGE STATES

ODCAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ery Match
st Local S
tches 1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LT 10
0-425-114-26234
quence 26234, Application US/10425114
blication No. US20040034888A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 THER INFORMATION: Clone ID: LIB4119-028-H6_FLI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -425-114-26234
           992
                                                            301
                                                                                                                      932
                                                                                                                                                                       241
                                                                                                                                                                                                                              872
                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                        812
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1921
                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             h 99.8%;
Similarity 99.9%;
GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACAATCC 120
                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DB 17; Length 3625;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                °,
  1051
                                                   360
                                                                                                       991
                                                                                                                                                              300
                                                                                                                                                                                                                     931
                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                871
                                                                                                                                                                                                                                                                                                                                                                                                                                       811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1800
```

961 GAACCTGTTCCCTGCTGTCTCAGAGGTGGACAGAAAAGCGAGAGACGCCCTCAGTCCACCC 1020	161 CTTGCAGGTGGGTTTGCTGAGTTCTCTGGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 420
RESULT 11 US-10-343-357-17 Sequence 17, Application US/10343357 Publication No. US20040058341A1 GENERAL INFORMATION: APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom APPLICANT: YAO, Monique G.; BURFORD, Neil APPLICANT: WANG, Yumei E.; SIEWART, Elizabeth A. APPLICANT: WANG, Yumei E.; SIEWART, Elizabeth A. APPLICANT: LEE, Ernestine A.; HAPALIA, April J.A. APPLICANT: LEE, Ernestine A.; HAPALIA, April J.A. APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M. APPLICANT: WEARNEY, Liam APPLICANT: WEARNEY, Liam APPLICANT: WEARNEY, Liam APPLICANT: WEARNEY, Liam TITLE OF INVENTION: PROTEIN PHOSPHATASES FILE REFERENCE: PI-0173 PCT CURRENT FILING DATE: 2003-01-28 PRIOR APPLICATION NUMBER: US/10/343,357 CURRENT FILING DATE: 2000-07-26 PRIOR APPLICATION NUMBER: US 60/221,679 PRIOR PRILING DATE: 2000-08-03 PRIOR APPLICATION NUMBER: US 60/223,272 PRIOR FILING DATE: 2000-08-03 PRIOR APPLICATION NUMBER: US 60/224,309 PRIOR APPLICATION NUMBER: US 60/224,309 PRIOR APPLICATION NUMBER: US 60/226,728 PRIOR APPLICATION NUMBER: US 60/229,254	Oy 1441 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGGTGCCCCCAGAGGTCCCTTTTA 1500

8 8 8 8

8 8 8 8 8 8 8 8 8 8

8 8 8 8 8 8 8

음 &

```
Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; PRIOR APPLICATION NUMBER: US 60/231,366
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 20
; SOFTMARE: PERL Program
; SEQ ID NO 17
; LENGTH: 3766
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CB1
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                                                                          1198
                                                                                                                                                                                                                                               1138
                                                                                                                                                                                                                                                                                                                      1078
                                                                                                                                                                                                                                                                                                                                                                                           1018
                                                               781
                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                             481
                                                                                                                                                                                                                                                                                                                                                                                                                                                              958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Н
                                              cTadrideactidritraderidadarerecederecedecarederarederiacidareare
                                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĠĀĊĪĠĪTĪTĊĪĊĀĊĪĠĪĀĊĪTĊĪĠĠĠĪĀĀĀĊĪĠĠĀĠĀĢĀĠĀĠĊĪŤĊĀĀĊĪĊĪĠĪŤCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           acteta drecera e en receis de la composita del composita del la composita del composita del la composita
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ĊACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Score 1991.8; 
; Pred. No. 0; 
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                          1377
                                                                                                                                                                                                                                                                                                                                                                                  1077
                                                           840
                                                                                             1317
                                                                                                                                                                    1257
                                                                                                                                                                                                                                         1197
                                                                                                                                                                                                                                                                                                              1137
                                                                                                                               780
                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            957
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
     Ś
                                     뮍
                                                             8
                                                                                                   뫄
                                                                                                                                        δ
                                                                                                                                                                               B
                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Вb
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
     1921
                                                                                                            2338
                                                                                                                                              1801
                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                      2218
                                                                                                                                                                                                                                                                                                                             2158
                                                                                                                                                                                                                                                                                                                                                             1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2038
                                                                                                                                                                                                                                                                                                                                                                                                  2098
                                                                                                                                                                                                                                                                                                                                                                                                                                      1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    961
                                                                                                    CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 1860
                                                                                                                                                                                              GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800
AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                        GCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                   ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                    TCGGATATCTTGGCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                            TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                              cTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGGACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCTATGCCAGTTCTCCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCCAGCGTGCCCAGCGTGCAGCCGTGTTAGAGGACAGCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  cccadccrcccadccrccadcccrccrcarradaddacaccccccrcgracaddcccrc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
1980
                                   2457
                                                                                                                                                                                                                                                   2277
                                                                                                                                                                                                                                                                                  1740
                                                                                                                                                                                                                                                                                                                      2217
                                                                                                                                                                                                                                                                                                                                                         1680
                                                                                                                                                                                                                                                                                                                                                                                             2157
                                                                                                                                                                                                                                                                                                                                                                                                                               1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2037
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           900
```

5 밁 δ В Ś 맔 Ś 밁

장 유

541 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT	QY 481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540	OY 421 ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480	Qy 361 CTTGCAGGTGGGTTTGCTGAGTTCTCCTTGTTTTCCCTGGCCTCTGTGAAGGAAAAATCC 420	Qy 301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360	OY 241 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240	OY 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	OY 61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	GGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60	Query Match 99.8%; Score 1991.8; DB 18; Length 4790; Best Local Similarity 99.9%; Pred. No. 0; Matches 1993; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	; LENGTH: 4790 ; TYPB: DNA ; TYPB: DNA ; ORGANISM: Homo sapiens US-10-648-593-115	PRIOR FILING DATE: 2002-08-27 NUMBER OF SEQ ID NOS: 557 SOFTWARE: Patentin version 3.2 SEO ID NO 115	; FILE REFERENCE: D0273 NP ; CURRENT APPLICATION NUMBER: US/10/648,593 ; CURRENT FILING DATE: 2003-08-26 ; PRIOR APPLICATION NUMBER: 60/406.385	APPLICANT: Bristol-Myers Squibb Company TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS	US-10-48-593-115 ; Sequence 115, Application US/10648593 ; Publication US20040106132A1 ; GENERAL INFORMATION.	SIT.T 12	Oy 1981 ATCATTGAGGTCTCC 1995	Db 2458 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517
B &	B &	}	;	}	? ₽ &	B &	Db Qy	, B &) p Q	D Q	B &	B &	g &	B &	g Q	Db	장	Qy
1621 TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC 1680	1361 CITICCACCAGCAGCACCACCACCACGAAGICICCIGGCCIGGCCTIAAGGGCTGGCAC 1820		AGCAAGGATTGGATTGGGTCAGAACCAGCAGCAGGAGCACCAGCAGCAGCAGGAGGAGG		AGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGACGAGACTCCCGAAACCAGTCCT	1261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1320		AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC	CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020 	901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960 	841 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900 	781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	721 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780	CGTGGTTGGACAATCAGTAGATTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT	784 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAAATTTTG 843 661 CCGTGGTTGGACAAATCAGTAGATTTCATTTGAGAAAAGCAAAAAGCTTTTGTGAGAAAAATTTTTG 720	601 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660

Db 589 ATGCCCATGAGATTGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCAAA 648	ь	99.8%; Score 1991.8; DB 18; Length 5145; 19.9%; Pred. No. 0; 1ve 0; Mismatches 2: Indels 0: Gans	; NAME/KEY: misc feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-20824	Homo	A R C	PRIOR FILING DATE: 2000-06-09 PRIOR PILING DATE: 2000-07-18 PRIOR FILING DATE: 2000-07-18 PRIOR APPLICATION NUMBER: 60/255,281	PRIOR APPLICATION NUMBER: 60/201,454 PRIOR PILING DATE: 2000-05-25 PRIOR APPLICATION NUMBER: 60/211,314	PRIOR FILLING PAIS: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR FILING DATE: 2000-02-17 PRIOR APPLICATION NUMBER: 60/189,862	CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 DETOD FILING DATE: 2003-02-04	; AFFLICANI: MODIAGAM, JOHN ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF ; TITLE OF INVENTION: HUMAN PROSTATE CANCER : FILE REPREPAGE. MET-0.0250%	GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson	RESULT 13 US-10-357-930-20824 i Sequence 20824, Application US/10357930 i Publication No. US2004025008681	Qy 1981 ATCATTGAGGTCTCC 1995 Db 1 2164 ATCATTGAGGTCTCC 2178	QY 1921 AGGTCACGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980	1861 2044	OY 1801 CAGAACCCAAGTGACAGAGCTGACTCGCGGGGGGGGGGG	QY 1741 GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800	1681 1864
29 1141 AG	1081	Qy 1021 TO	Qy 961 GJ 	Qy 901 C; Db 1489 C;	Qy 841 A: 	Qy 781 AJ Db 1369 AJ	Qy 721 C	Qy 661 C	Qy 601 A	Qy 541 C	Db 1069 C	421 1009	Qy 361 c	Qy 301 c	Qy 241 7 Db 829 7	Qy 181 (Db 769 (Qy 121 (Db 709 (Qy 61 1 Db 649 1
CCCAGCGIGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1728 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200	CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140	TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020	CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 960	41 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900 	AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATC 780	CCGTGGTTGGACAAAICAGTAGATTTCATIGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720 	ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660	CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 600 	CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540	ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480	CTTGCAGGIGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 420	GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360	TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	GACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAGGTTGACATTGAT 240 	CACATTTIGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180	AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATACAATACATCC 120

```
RESULT 14

US-10-357-930-20969
US-10-357-930-20969, Application US/10357930

Sequence 20969, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                         ઈ
                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                  중 음 중
                                                                                                                                                                                                                                                                                                                                                                                      음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            & 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                               2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1201
                                                                                                                                                                                                                                                                                                                                                        AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAAC
                                                                                                                                                                                                                       ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                         AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCCACTGCATCGAAGTGGGAGGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATAAGGAGGAAGCCAGCATCCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                      AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                             CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                  1995
                                                                                                                                                                                                                       2583
                                               FOR
                                                                                                                                                                                                                                                                                                                                                                 1920
                                                                                                                                                                                                                                                                                                                                                                                               2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1260
                                                                                                                                                                                                                                                                                                                                      2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                      2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1788
                                               ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FREESEQ for Windows Version 4
SEQ ID NO 20969
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-20969
                S
                                              밁
                                                                 Ş
                                                                                                    밁
                                                                                                                         Ş
                                                                                                                                                    망
                                                                                                                                                                                   Ś
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 1993;
                                              1129
                                                                                                       1069
                                                                                                                                                             1009
                   601
                                                                         541
                                                                                                                                481
                                                                                                                                                                                         421
                                                                                                                                                                                                                     949
                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                              889
                                                                                                                                                                                                                                                                                                                                      829
                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                    709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ب
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity 99.9
93; Conservative
ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                             CAGCAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                   CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCCTGACTTT
                                                                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                              GACTGTTTT
                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                    TCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99.88;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                     1128
                                                                                                                                                             1068
                                                                                                                                                                                                                     1008
                   660
                                              1188
                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                              948
                                                                                                                                                                                                                                                                                                                                      888
                                                                                                                                                                                                                                                                                                                                                                                               828
                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                    768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    6
```

유

음 성 음 성

28	1681 ACAGAGTECTEACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 174
68 80	.621 TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC 16
20	561 CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 16
60	1501 TCTCCACTGCATCGAAGTGGGAGGGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC 156
88	1441 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 15
40	AGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 14
80	1321 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGGAGACTCCCCGAAACCAGTCCT 13
08	261 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 13
48	201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCAGCATCCTTACATGGCTTC 12
88	1141 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 12
128	1081 CCCAGCGTGCCCAGCGTGCAGCCGTCGTTTAGAGGACAGCCCGCTGGTACAGGCGCTC 11
)80)80	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 10
)20 508	961 GAACCIGICCCIGCTGI 549 GAACCIGICCCIGCIGI
548	901 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 96
00 488	41 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 9
428	81 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA
80 368	21 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 7
20 308	661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 7
248	89 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1

 음 성

유 성 유 성

유

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
; TYPE: DNA
; GRANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-21071
        밁
                                    5
                                                                                 밁
                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
PRIOR FILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
US-10-357-930-21071
| Sequence 21071, Application US/10357930
| Publication No. US20040259086A1
| GENERAL INFORMATION:
| APPLICANT: Schlegel. Robert
| APPLICANT: Schlegel. Robert
| APPLICANT: Monahan, John
| TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER
| FILE REFERENCE: MRI-007ECN
| FILE REFERENCE: MRI-007ECN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멎
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뫉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                      Query Match
Best Local Similarity
Matches 1993; Conserv
                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 21071
LENGTH: 5145
        649
                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1741
                                          61
                                                                                                                        Н
AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                                                 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
                                                                             ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGGGGGTGGATGAAGAGAGGCCCCTTTGAA 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGTCACGGGÄÄGÄĞCTGGGGÄÄÄÄĞTGGGCÄĞTCÄGTCTAGCTTTTCGGGGCÄGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                          Conservative
                                                                                                                                                                         99.8%;
                                                                                                                                                                                                                                                          A, T, C or
                                                                                                                                                      ; Score 1991.8; ; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                 4.0
                                                                                                                                                                                             DB 18; Length 5145;
                                                                                                                                                      2;
                                                                                                                                                      Indels
                                                                                                                                                      0;
                                                                                                                                                    Gaps
                                                                           648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1800
                                                                                                                                                      0
```

Search completed: February 15, 2005, 15:52:32 Job time : 1221.22 secs

This Page Blank (uspto)

```
Result
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĕ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       92:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 BB 80
         902.8

902.8

364.2

294.6

223

1187.8

1106.8

1106.8

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.2

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.3

96.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Beq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query
Match Length I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Issued Patents NA:*
1: /cgm2 6/ptodata/1
2: /cgm2 6/ptodata/1
3: /cgm2-6/ptodata/1
4: /cgm2-6/ptodata/1
5: /cgm2-6/ptodata/1
6: /cgm2-6/ptodata/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IDENTITY NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Pebruary 15, 2005, 02:21:00; Search time 163.961 Seconds (without alignments) 9041.598 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-108_COPY_538_1443
         atggcccatgagatgattgg....agaagattaagaaccagact
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6A_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
      15948
23547
23577
23577
23571
23571
279
279
279
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
27109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         멂
US-09-816-494-3
US-09-816-494-1
US-09-920-668-3
US-09-949-016-3250
US-09-513-999C-387
US-09-513-999C-3884
US-09-513-999C-3884
US-09-513-999C-3884
US-09-52-146-3
US-09-922-146-3
US-09-922-146-3
US-09-922-146-3
US-09-023-655-946
US-09-949-016-2655-946
US-09-949-016-2655-347
US-09-702-705-801
US-09-702-705-801
US-09-7614-124B-801
US-09-614-124B-801
US-09-618-6457-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-614-124B-804
US-09-611-325-804
US-09-618-824-804
US-09-658-824-804
US-09-658-824-804
US-09-658-824-804
US-09-589-184-804
US-09-658-824-804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2405568
                         Sequence 3, Appli
Sequence 1, Appli
Sequence 3, Appli
Sequence 3250, Ap
Sequence 3684, Ap
Sequence 91, Appli
Sequence 1, Appli
Sequence 4617, Ap
Sequence 1, Appli
Sequence 1, Appli
Sequence 1, Appli
Sequence 346, Ap
Sequence 347, Ap
Sequence 801, Ap
Sequence 804, Ap
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description.
                                                             밁
                                                                                                                    á
                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo
         361
                                                                   301
                                                                                                                             301
                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             sapiens
```

45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9	9.9
2109	2109	2109	2109	2109	2109	2064	2064	2064	2064	2064	2064	1238	1238	1238	1238	1238	1238
4.	4	4	4	4	4	4.	4	4.	4.	4	4	4	4	4	4	4	4
US-09-658-824-826	US-09-589-184-826	US-09-671-325-826	US-09-614-124B-826	US-09-736-457-826	US-09-702-705-826	US-09-658-824-825	US-09-589-184-825	US-09-671-325-825	US-09-614-124B-825	US-09-736-457-825	US-09-702-705-825	US-09-658-824-803	US-09-589-184-803	US-09-671-325-803	US-09-614-124B-803	US-09-736-457-803	US-09-702-705-803
Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Seguence	Sequence	Sequence	Seguence	Seguence	Sequence	Sequence	Sequence
826,	826,	826,	826,	826,	826,	825,	825,	825,	825,	825,	825,	803,	803,	803,	803,	803,	803,
App	App	ДQА	App	Ągp	App	App	App	App	đđ	Ąpp	đđ	App	App	App	App	App	App

ALIGNMENTS

```
Sequence 3, Application US/09816494
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUJ
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
FILE REFERENCE: 10448-030002
CURRENT PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOPTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1998
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 904; Conservative
                                                                                                                                                                                                                                            181 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                 121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1 ATGGCCCATGAGATGATTGGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 902.8; DB 4;
Pred. No. 5e-308;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
```

120

60

0

60

240

180 180 120

240

360 360 300 300

NAME/KEY: CDS; IOCATION: (589)(2583) US-09-816-494-1 Query Match Best Local Similarity 99.8%; Pred. No. 7.7e-308; Matches 904; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Matches 904; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Qy 1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGCTGCTGGAA 60	US-09-816-494-1 US-09-816-494-1 Sequence 1, Application US/09816494 Patent No. 6664099 GENERAL INFORMATION: APPLICANT: Meyers, Rachel A. TITLE OF INVENTION: 98692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002 CURRENT APPLICATION NUMBER: US 60/9/816,494 CURRENT FILING DATE: 2001-03-23 PRIOR APPLICATION NUMBER: US 60/191,858 PRIOR FILING DATE: 2000-03-24 NUMBER OF SEQ ID NOS: 10 SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 1 LENGTH: 3544 TYPE: DNA ORGANISM: Homo sapiens	Qy 781 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	OY OL ATCCCCGAGTCTCATTTCCTGCGTGCCTGTGATGAAACTTTTGGTGAAAATTTTG	361 421 421 481 481 541
RESULT 3 US-09-920-668-3 ; Sequence 3, Application US/09920668 ; Patent No. 6482644 ; GENERAL INFORMATION: ; APPLICANT: Lex M. Cowsert ; APPLICANT: Brett P. Monia ; TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION ; FILS REFERENCE: RTS-0246 ; CURRENT APPLICATION NUMBER: US/09/920,668 ; CURRENT FILING DATE: 2001-08-01 ; NUMBER OF SEQ ID NOS: 49	Qy 661 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCTCCAATGGATGTGTT 720	Qy 481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540	Qy 301 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 360	Db 649 AGTIGAACAGAAAAAAGTIGTTAACTAATGATCAAAGCTCCCAAGATTAAGATGACATTGAT 240 Qy 181 GACAAAGTIGTAAATAACAAGTCCAAGCTTAAGAACAATAACAATACAACAG 180 Qy 181 GACAAAGTIGTAAATAACAACAGCATTAAGAACATAAAGGTTGAAAGAGTTGAAACATTGAACAG 240 Db 769 GACAAAGTIGTAAATTACAGAGCTCATCAGCAATTCAAGGTTGACATTGACATTGAT 240

LENGTH: 2377

```
8
                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                 ક
                                                    밁
                                                                        ð
                                                                                                  멂
                                                                                                                                                           밁
                                                                                                                                                                                    5
                                                                                                                                                                                                                吊
                                                                                                                                                                                                                                            श्च
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 40.4%;
Best Local Similarity 64.5%;
Matches 563; Conservative 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo mapiens
PEATURE:
NAME/KEY: CDS
LOCATION: (135)...(2012)
1005
                        865
                                                                                                            885
                                                                                                                                                                   825
                                                                                                                                                                                                                          765
                                                                                                                                                                                                                                                                                                           565
                                                                                                                                                                                                                                                                                                                                         645
                                                                                                                                                                                                                                                                                                                                                                   505
                                                                                                                                                                                                                                                                                                                                                                                                 585
                                                                                                                                                                                                                                                                                                                                                                                                                           445
                                                                                                                                                                                                                                                                                                                                                                                                                                                        525
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           225
                                                                                805
                                                                                                                                       745
                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                 705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   388
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            345
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  165
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           28
                                                                                                                                                                                                                                                                                                                                                         GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAACTGGAGAAGACCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
GGCCAGCTGCTGGAGTACGAGCGCACGCTGAAG 1037
                                                                                                                                                                                                                                                                                                          TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCCCTGCTACCCATGAGCCTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCTGGACGGCTTCGACAGCGTGGCCATCCTCACTGGGGGCTTCGCCACCTTCTCC
                GGCCAACTCCTGGACTATGAGAAGAAGATTAAG
                                                                         GAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTG
                                                                                                            TCCCGCTCTGCCACCATCGCCATCGCCTACATCATGAAGACCATGGGCATGTCCTCCGAC
                                                                                                                                                                                                                          GTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGAT
                                                                                                                                                                                                                                                                                 CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGG
                                                                                                                                                                                                                                                                                                                                         GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                                                                                                                                                                                                                                               CAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAAAGCTCCCAAGATGTTGCCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCCGGCTGCACGCAGCCAGGTGGAGGCTACGGAGCCACAGGACGTGGTCGTCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAAC
                                                       GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                 TCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT
                                                                                                                                                                   TTCATTGAGAAAGCCAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAGCACGCGGGACGCCAGCGTGCTGGCCGCAGACAGCTTCCTCCATCCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGCTCCAAGCTGGTGAAGCGGCGGCTGCAGCAGGGCAAGGTGACCATTGCGGAGCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           <u>ATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATT</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 365.8; DB 4;
pred. No. 6.1e-118;
0; Mismatches 307;
                          897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2377;
                                                                                                                                        804
                                                                                                                                                                                                                                                     684
                                                                                                                                                                                                                                                                                                             624
                                                                                                                                                                                                                                                                                                                                                                                                                           504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              87
                                                                                864
                                                                                                            944
                                                                                                                                                                                             744
                                                                                                                                                                                                                          824
                                                                                                                                                                                                                                                                                                                                         704
                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224
```

```
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR APPLICATION NUMBER: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3250
LENGTH: 2351
TYPE: DNA
ORGANISM: Human
US-09-949-016-3250
片
                     Ş
                                                       밁
                                                                           δ
                                                                                                               밁
                                                                                                                                        S
                                                                                                                                                                            片
                                                                                                                                                                                                Ş
                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                           닭
                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION: APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3250, Ap
Patent No. 681233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS FILE REFERENCE: CL001307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ma
Local
562;
                           625
                                                                                                                                                                                                         445
                                                                                                                                                                                                                                       499
                                                                                                                                                                                                                                                                  388
                                                                                                                                                                                                                                                                                                 439
                                                                                                                                                                                                                                                                                                                                                           379
                                                         679
                                                                                                                    619
                                                                                                                                                                            559
                                                                                                                                                                                                                                                                                                                             328
                                                                                                                                                                                                                                                                                                                                                                                        268
                                                                                                                                                                                                                                                                                                                                                                                                                      319
                                                                                                                                                                                                                                                                                                                                                                                                                                                  208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATTGTTACTGAGAGGGTTGGTGGCTGCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATT
                  GTGCCTGTGAATGACAGCTTTTTGTGAGAAAATTTTTGCCGTTGGACAAATCAGTAGAT 684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAGCCGGCCATTTGTGGAATACAATACAATCCCCACATTTTGGAAGCCATTAATATCAAC
                                                                          TTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGT
                                                                                                                                   GGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTG
                                                                                                                                                                                                                                        CGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT---CTAGTCCCTACCTGCATTTCT
                                                                                                                                                                                                                                                                                                                                                                                        CAAAGCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAGCCGCTCCTTCGTGGAGTACAACAGCTGGCATGTGCTCAGCTCCGTCAACATCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTCAACGCCAGCAACTCCTGCCCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGG
                                                                                                                    GGCTCGCAGAAGGACGTCCTAAACAAGGATCTGATGACGCAAAATGGAATAAGCTACGTC
                                                                                                                                                                             CAGCCCTGCCTGTCCCCAGCGTGGGCCTGACCCGCATCCTGCCTCACCTCTACCTG
                                                                                                                                                                                                   CAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCCAATCTTTATCTT
                                                                                                                                                                                                                                                                                                                            AAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCT
                                                                                                                                                                                                                                                                                                                                                           CAGAGCACGCGGÁCGCCAGCGTGCTGGCCGCAGACAGCTTCCTCCATCCTGCTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCCGGCTGCACGCAGGTGGAGGCTACGGAGCCACAGGACGTGGTGGTCTATGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATC
                                                                                                                                                                                                                                                                                                 AAGCTGGACGGCTGCTTCGACAGCGTGGCCATCCTCACTGGGGGGCTTCGCCACCTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 364.2; DB 4;
Pred. No. 2.2e-117;
0; Mismatches 308;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ASSOCIATED
OF DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ω
•
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                            438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     198
                                                                                                                    678
                                                                                                                                                 564
                                                                                                                                                                                                                                                                    444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  87
 798
                                                         738
                                                                                                                                                                             618
                                                                                                                                                                                                                                        558
                                                                                                                                                                                                                                                                                                   498
                                                                                                                                                                                                                                                                                                                             387
                                                                                                                                                                                                                                                                                                                                                                                        327
                                                                                                                                                                                                                                                                                                                                                                                                                       378
                                                                                                                                                                                                                                                                                                                                                                                                                                                   267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       147
```

```
J.B.

....LICANT: Duclert, A.

TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.

FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
RIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
TYPE: DN7
TOD: DN7
                                            ; OTHER INFORMATION: Xaa=His or US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
 Query Match
Best Local Similarity
                                                                      LOCATION:
                                                                                   NAME/KEY: UNSURE
                                                                                                              OTHER INFORMATION:
                                                                                                                                                                                 NAME/KBY: misc_feature
LOCATION: 58
                                                                                                                                                                                                                  LOCATION: 36
OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                            NAME/KEY: misc_feature
                                                                                                                       NAME/KEY: misc_feature
OCATION: 237
                                                                                                                                                                  OTHER INFORMATION: r=a or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
LOCATION: 17
                                                                                                                                                                                                                                                                         OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                             OTHER INFORMATION: y=c or t
                                                                                                                                                                                                                                                                                                                                                                                   OTHER INFORMATION: h=a
                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PEATURE:
                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               865 GGCCAACTCCTGGACTATGAGAAGAAGATTAAG 897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACGCCTACAGGTTCGTGAAGGACAGGCGCCCGTCCATCTCGCCCAACTTCAACTTCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACCTTCAATTTTCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCCCGCTCTGCCÁCCATCGCCÁTCGCCTACÁTCATGAAGACCATGGGCATGTCCTCCGÁC 918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GGCCAGCTGCTGGAGTACGAGCGCAGCCTGAAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCCGCTCCGCCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGAT 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATC 744
                                                                                                             w≈a
 32.5%;
                                                                                                             ဝင္ပ
                                                                                                                                                                                                                                                                          or
                                                                                                                                                                                                                                                                                                                                                                                   or
                                                                                                                                                                                                                    9
                                                                                                                                                                g
                                                                                                                                                                                                                     ი
                                                                                                                                                                                                                                                                                                                                                                                   a
                                                                                                                                                                                                                                                                                                                                                                                   ö
Score 294.6; DB 4;
Pred. No. 2.2e-93;
                                                                                                                                                                                                                     or t
                                                      Gln
                                                                                                                                                                                                                                                                                                                                                                                   c
           Length
           333;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
```

```
RESULT 6
US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PACENT OF THE DETECTION OF THE DETECTION
STRAND.
TOPOLOGY: 11...
IMMEDIATE SOURCE:
LLERARY: LUNGFET03
TONE: 1234795
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 91, App...
No. 6500938
                                                                                                                                                                                                                                                                TELEFAX: (650) 845-416
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                   ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIIM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WOYD PERFECT 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION WINDER: US/09/016,434
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        332 TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   272 GCTCCCAAGATGTTGCCTCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239 GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      326;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           93
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               34 ACTGAGAGGGTTGGTTGGCTGCTGGAAAGTGGGAACGG-AAAAAGTGCTGCTAATTGATAG 92
                                                                                                                                                                                       : 279 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGAGAGAGCTTCAACTCTGTTCACCTGCTTGCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC 211
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGGCCATTTGTGGAATA-CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT 151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTGAGAGGTTGGTGGHY--KCTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                            single
                                                                                                                                                                                                                                                                                                                            845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                         PA-0002 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SIGNALING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  118
```

```
Ş
                                                       밁
                                                                            S
                                                                                                       밁
                                                                                                                                       ঠ
                                                                                                                                                                         밁
                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature; LOCATION: 164; OTHER INFORMATION: k=g
US-09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                                ; SEQ ID NO 3684
; LENGTH: 378
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 7
US-09-513-999C-3684/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
PILE REPERENCE: 59 US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT APPLICATION NUMBER: US/09/513,999C
PRIOR APPLICATION NUMBER: US/09/512,487
PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3684, Application US/09513999C Patent No. 6783961
                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 223;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
                                                                                                                                                                                                                                                                                                                                                                   NAME/KEY: CDS
LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                          FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                   Local
                                                                                                                 318
                                                                                                                                                                          378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        145
198
                          224
                                                        258
                                                                                    164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                            104 TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA 163
                                                                                                                                                                                                                                     189;
                                                                                                                                                                                          44 TGGTGGCTCTGCTGGAAAGTGGAAACGGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25
                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                         TGGTGGCTCTGCAAAAGTGGAACGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAGGTTGAC 234
                                                                                      AGCGAAGGTTGCAACAGGACAAAGTGTTAAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                 TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  24.6%;
                                                                                                                                                                                                                                                20.7%;
188
                                                                                                                                                                                                                                                                                                             õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 223; DB 4; Length 279; Pred. No. 4.1e-68;
                                                                                                                                                                                                                                Score 187.8; DB 4;
Pred. No. 1.5e-55;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                             DB 4;
                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                          319
                                                                                                                                                                                                        103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                        199
                                                                                   223
                                                                                                                259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
; LENGTH: 1830
; TYPE: DNA
; ORGANISM: Homo s
US-09-557-921-1
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASS
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT APPLICATION NUMBER: 60/241,755
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILLING DATE: 2000-10-20
PRIOR FILLING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILLING DATE: 2000-10-03
PRIOR PRIOR APPLICATION NUMBER: 60/231,498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-949-016-4617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 8
US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Luche, Ra
APPLICANT: Wei, Bo
TITLE OF INVENTION:
TITLE OF THE OF THE
                                                                                                                                                                                                                                                                                                                                                                                              Sequence 4617, Applion Patent No. 6812339
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 13.8%;
Best Local Similarity 56.7%;
Matches 251; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 1, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1096 CTCAGGÁCCTGGACACCÁTGCÁGCGGCTGAACÁTCGGCTÁCGTCATCAACGTCÁCCACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1036 TCGAGAACGCTGAGCTCACCCCCATCTTGCCCTTCCTTGGCAATGAGCAGGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  521 TCCTCAACAAGGAGCTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGCCAACATTGGGCCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGTCCAAAGCCTGACTTT---ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTTCGÁGGAAGACCTAÁACAAC 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCATGACTGATGCTTATAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGCAACAAGCAGAACCTGCGGCAGTACTTTGAAGAGGGCTTTTGAGTTCATTGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGCTTTTGTGAGAAAATTTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTGGGGTGTCCCGCCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DSP-10 DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 124.6; DB 4;
Pred. No. 1.1e-32;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PHOSPHATASE
                                                                                                                                                                                                                                                                                              ASSOCIATED
OF DETECTION
                                                                                                                                                                                                                                                                                           DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
                                                                                                                                                                                                                                                                                                  AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    u
                                                                                                                                                                                                                                                                                                  USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1095
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              637
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1215
```

```
Ś
                                                                                                                                      밁
                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-922-146-3
; Sequence 3, Application US/09922146
; Patent No. 6566133
                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-922-146-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-4617
                                                                                                                                                                                                                                                                 Query Match 11.8%;
Best Local Similarity 55.3%;
Matches 229; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 48
SEQ ID NO 3
LENGTH: 2303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 9 EXPRESSION
FILE REFERENCE: RTS-0252
CURRENT APPLICATION NUMBER: US/09/922,146
CURRENT FILING DATE: 2001-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: PastSEQ for Windows Version
SEQ ID NO 4617
LENGTH: 2283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Local Similarity Matches 229; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: CDS
LOCATION: (11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 2303
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1023
535 CTGATACAGCAGAATGGGATTGGTTATATGTGTTATAATGCCAGCTATACCTGTCCAAA---G 591
                                                                                                                723 CCTGTCCAGATCCTGCCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     772 ТАСАТСАТБААБАББАТББАТБТСТТТАБАТБААБСТТАСАБАТТТБТБАААБААДА
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            963 Técededrecrecence de la reconstruction de la re
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        712 GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              535 CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAA---G 591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             475 CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG
                                                                                                                                                             CCAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGGAGATGTCCTCAACAAGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                     (114) ... (1268)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG 1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAG 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCCAACCTCCCAAACTTC 842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAG 651
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCTGTCCAGATCCTGCCAACCTCTATCTGGGCAGTGCCCGGGATTCCGCCAATTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         11.8%;
                                                                                                                                                                                                                                                              Score 106.8; DB 4;
Pred. No. 2.7e-26;
0; Mismatches 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 106.8; DB 4;
Pred. No. 2.7e-26;
0; Mismatches 182;
                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                 Length 2303;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 2283;
                                                                                                                                                                                                                                                              ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3
                                                                                                                                                                                       534
                                                                                                                782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     782
```

```
; STRANDEDNESS: Si
; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; LIBRARY: GENBANK
; CLONE: 91418933
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 11
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ᅜ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1135, Application Patent No. 6500938
                                                                                                                                                                                                                            TELEFAX: (650) 845-41 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
                                                                                                                                                                                          SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                    NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION NUMBER: US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                     CLASSIFICATION: PRIOR APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                               ATTORNEY/AGENT INFORMATION: NAME: Zeller, Karen J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
                                                                                                                                                                            TYPE:
                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                    TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ADDRESSEE: INCYTE PHARMACEUTICALS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1083 AAGTCTAACATCTCCCCCAACTTCAACTTCATGGGGCAGTTGCTGGACTTTGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 783 AGCCTGGCCAAACTGGGCATCCGCTACATCCTCAATGTCACCCCCAACCTCCCAAACTTC
   Similarity
                                                                                                                                                                        nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         адасстастататстссаадсттсааттттстдддссаастсстддастатдад 885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                тасатсатбалдабатбасатбтстттабатбалдсттасабатттбтбаладалала
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCGAGAAGAATGGTGACTTTCACTACAAGCAGATCCCCATCTCCGACCACTGGAGCCAG 902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ccreactriarccceaercreatriccrecererecerereaareacaecritiereae esi
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TACCTCATGCAGAAGCTCCACCTCTCTCTCAACGATGCCTATGACCTGGTCAAGAGGAAG 1082
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCCACCATCGCTATCGCC 771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACCTGTCGCGGTTCTTTCCGGAGGCCATTGAGTTCATTGATGAGGCCTTGTCCCAGAAC 962
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAAT 711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCGGGGTGCTCCACTGCTTGGCGGGGGTCAGCCGTTCTGTCACCGTCACTGTGGCC
                                                                                                                                                                                        2109 base pairs
                                                                                                 GENBANK
                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                    (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HEREWITH
                                                                                                                                                    single
                                                                                                                                                                                                                                                  845-4166
   10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US/09016434
                                                                                                                                                                                                                                                                                                       PA-0002 US
Score 96.2; DB 4;
Pred. No. 1.4e-22;
                 Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1022
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    842
```

```
RESULT 12
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 946,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patent No. 6607879
                    INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                         STREET: 31..
STREET: 31..
CITY: PALO ALTO
CTATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: Cocks, Benjamin G. APPLICANT: Susan G. Stuart APPLICANT: Jeffrey J. Seilhamer TITLE OF INVENTION: COMPOSITION TITLE OF INVENTION: EXPRESSION
                                                                                         ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                            SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                          APPLICATION NUMBER: FILING DATE: HEREW CLASSIFICATION:
                                                                                                                                                                                    PILING DATE:
CLASSIFICATION:
                                                                          TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ADDRESSEE:
 ENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1099 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      222;
                                                                                                                                                                                                                                                                                                                                                                                                                              94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCGAATCTCTTTGAGAAC 1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAAATGAAAAATCCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Application US/09023655
                                                         (650)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                       (650) 855-0555
650) 845-4166
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     INCYTE PHARMACEUTICALS,
                                                                                                                                                                                                                                                                               HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1508
                                                                                                                                                                                                                                                                                                US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THE DETECTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OF BLOOD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ų.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
```

```
밁
                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 13
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IMMEDIATE SOURCE:
; LIBRARY: GENBAN;
; CLONE: g1418933
US-09-023-655-946
                                                                                                                                                 ; ORGANISM: Human US-09-949-016-2615
                                                                                                                                                                                                  SOFTWARE: FASTSEQ
SEQ ID NO 2615
LENGTH: 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2615, App
Patent No. 6812339
                                                                          Matches
                                                                                                          Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity Matches 222; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
                                                                                                                                                                                                                                                                                                             FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
                                                                                                                                                                                 LENGTH: 24
TYPE: DNA
                                                                                             Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
TOPOLOGY: lin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1099
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1039
                                  484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGC---CTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG
ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAATGAAAAATCCAAC 133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATTCGGCATCAAGTACATCTTGAAACGTCACCCCCAATTTGCCGAATCTCTTTTGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTTT 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAACTTGGACGTGTTGGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGTTTTTCCCTGAGGCCATTTCTTTCATAGATGAAGCCCGGGGCAAGAACTGTGGTGTC
                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Application US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                        for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        single
                                                                                         10.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       10.6%;
                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                        Score 96.2; DB 4;
Pred. No. 1.6e-22;
0; Mismatches 188;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 96.2; DB 4; Pred. No. 1.4e-22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches 188;
                                                                                                                                                                                                                                          4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                             ASSOCIATED
OF DETECTION AND USES THEREOF
                                                                                                          Length 2475;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 2109;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                        3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      893
                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1278
```

```
Sequence 347, Application C., Sequence 347, Application C., Patent No. 6607879

| Patent No. 6607879
| GENERAL INFORMATION: Cocke, Benjamin G. APPLICANT: Susan G. Stuart APPLICANT: Jeffrey J. Seilhamer COMPOSITION FO
US-09-023-655-347
                                                                                              TELEFAX: (650) 855-0555

TELEFAX: (650) 845-4166

INFORMATION FOR SEQ ID NO: 347:
SEQUENCE CHARACTERISTICS:
LENGTH: 1208 base
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 14
US-09-023-655-347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                     COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
FILING DATE: HEREWITH
          IMMEDIATE SOURCE:
LIBRARY: THYRNG
CLONE: 1444245
                                                                                                                                                                                          NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0001 US
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                           ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TITLE OF INVENTION: COMPOSITION TITLE OF INVENTION: EXPRESSION NUMBER OF SEQUENCES: 1508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            STATE: C
                                                             STRANDEDNESS:
TOPOLOGY: lir
                                                                                                                                                                                                                                                                            FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                           CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STREET: 3174 PORTER DRIVE CITY: PALO ALTO STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1188 GCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGGAGCCAAAACCTGTCC 1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                          nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAT 893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACTGTGGCTTACCTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAGAGGACGCT 1480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAAAATGAAAAATCCAAC 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAGTGCACTGTTTAGCTGGGAATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGITITITCCCIGAGGCCATITCTTTCATAGATGAAGCCCCGGGGCAAGAACTGIGGTGTC 1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAATTCGGCATCAAGTACATCTTGAACGTCACCCCAATTTGCCGAATCTCTTTGAGAAC 1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        cagaarregearregerrarererrarareceaerrarecerereraage---creacerr 600
                           THYRNOT03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INCYTE PHARMACEUTICALS,
                                                                           single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                 S
                                                                                               Ś
                                                                  밁
                                                                                                                                    밁
                                                                                                                                                                δ
                                                                                                                                                                                                   Б
                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
```

```
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Rentier, Jane
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FASTSEQ FOR WINDOWS Version 3.0
SEQ ID NO 801
SEQ ID NO 801
LENGTH: 1619
TYPE: DNA
ORGANISM: Homo sapien
US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 15
US-09-702-705-801
                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 10.4%;
Best Local Similarity 64.3%;
Matches 142; Conservative
                                             724
                                                                                       497
                                                                                                                              664
                                                                                                                                                                     437
                                                                                                                                                                                                               604
                                                                                                                                                                                                                                                380 GCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAACC---ACTTTGAA 436
                                                                                                                                                                                                                                                                            544 CAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 603
                                                                                                                                                                                                                                                                                                                              320 ATCCTTCCCTTCCACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATGCTGGAC 379
                                                                                                                                                                                                                                                                                                                                                                     484 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 543
                                                                                                                                                                                                                                                                                                                                                                                                                        218;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       184 TCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    800 TAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATT 859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          142;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          680 TAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTTCTAGTGCACTGTTTAGCTG 739
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               64
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4
                            GTGCACTGTTTTAGCTGGGATCTCCCCGCCTCCATCGTTATCGCCTATCATGAAG 783
                                                                                                                     TGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTA 723
                                                                                                                                                                                                    CCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTGCCG 663
GTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTGATGATG
                                                                              TGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGCGTGCTG
                                                                                                                                                               GGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATCAGCTCC 496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGGTGTCCCGCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCACACTCGGATGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATGAAGAGGATGGACATGTCTT 799
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGCTTCTCATCCACTGCCAGGCTG 63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCCCCAAACCTTAACT 183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fanger, Gary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/09702705
                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                       10.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                     °.
                                                                                                                                                                                                                                                                                                                                                                                                                   Score 91.6; DB 4;
Pred. No. 4.9e-21;
0; Mismatches 189;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 94.6; DB 4;
Pred. No. 3.4e-22;
0; Mismatches 79;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HE
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 1619;
                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                 ω
••
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
616
                                                                              556
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      123
```

B & B &	784 AGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	
Search co Job time	Bearch completed: February 15, 2005, 11:51:07 Job time : 164.961 весв	
		

This Page Blank (uspto)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Minimum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IDENTITY_NUC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-108_COPY_538_1443
906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 February 15, 2005, 10:38:29; Search time 552.782 Seconds (without alignments) 9670.754 Million cell updates/sec
                                                                                                                                            14:
15:
16:
17:
                                                                                                                                                                                                                                                  9:
10:
11:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gapop 10.0 , Gapext 1.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Published Applications NA:*

1: /cgn2_6/prodata/1/pubpna/US07_

2: /cgn2_6/prodata/1/pubpna/US06_

3: /cgn2_6/prodata/1/pubpna/US06_

3: /cgn2_6/prodata/1/pubpna/US06_

6: /cgn2_6/prodata/1/pubpna/US06_
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           atggcccatgagatgattgg.....agaagattaagaaccagact 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                    /cgn2_6/ptodata/1/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/1/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                         /cgn2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq:
                                                                                                                                                                                                                      cgn2
                                                                                                                                                                                                                                                                             cgn2
                                                                                                                                                                       cgn2
gn2_6/ptodata/1/pubpna/US09_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US09E_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10E_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
gn2_6/ptodata/1/pubpna/US10F_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           10757346
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

110	o 8 7 6	ተሪስካ	Result No.
902.8	902.8 902.8	902.8 902.8 902.8 902.8 902.8	Score
99.6	99.6 6666	99.66 99.66	Query Match
3544	3059 3496 3521	1998 1998 1998 2071 2732	Query Match Length DB
17 18	17 9 18	9 17 18 17	•
US-10-377-072-25 US-10-377-072-25	US-10-257-026-1 US-09-964-277-1 US-10-370-715B-261 US-09-816-494-1	US-09-816-494-3 US-10-377-072-27 US-10-377-072-27 US-10-072-012-257 US-10-072-012-257 US-10-168-506-2	ID
Sequence 25, Appl Sequence 25, Appl	Sequence 1, Appli Sequence 1, Appli Sequence 261, App	Sequence 3, Appli Sequence 27, Appl Sequence 27, Appl Sequence 257, App Sequence 2, Appli	Description

-10-343-357-17 -10-347-930-20824 -10-357-930-20824 -10-357-930-21003 -10-357-930-21003 -10-357-930-21303 -10-357-930-26669 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-10878	17 US	2476	37.1	335.8	5
-10-343-357-17 -10-343-357-17 -10-367-930-20824 -10-357-930-20869 -10-357-930-20869 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-26669 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11236 -10-357-930-10878 -10-357-930-10878 -10-357-930-10878 -10-357-930-10878 -10-357-930-10878 -10-357-930-11236		377		8 .	44
-10-343-357-17 -10-343-357-17 -10-367-930-20824 -10-357-930-20869 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-22820 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-28675 -10-357-930-28675 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1274 -10-357-930-1276 -10-357-930		377	•	8	43
-10-343-357-17 -10-343-357-17 -10-64-8-93-115 -10-357-930-20824 -10-357-930-20869 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-26669 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-37415 -10-357-930-10878 -10-357-930-10878 -10-357-930-10878 -10-357-930-2074		345	•	39.	42
-10-343-357-17 -10-343-357-17 -10-348-933-115 -10-357-930-2084 -10-357-930-2086 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26659 -10-357-930-26615 -10-357-930-26615 -10-357-930-26923 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27146 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-1126 -10-357-930-1126 -10-357-930-1126 -10-357-930-1127 -10-357-930-1128 -10-357-930-1128 -10-357-930-1128 -10-357-930-1128 -10-357-930-1128 -10-357-930-2066 -10	18 US	346	•	<u>.</u>	41
-10-343-357-17 -10-648-593-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26629 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27146 -10-357-930-27146 -10-357-930-27146 -10-357-930-27146 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-27167 -10-357-930-32060 -10-357-930-32060 -10-357-930-32060 -10-357-930-32060 -10-357-930-32060	18 US	422	•	4	40
-10-343-357-17 -10-343-357-17 -10-364-9-93-115 -10-357-930-20824 -10-357-930-20824 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-22669 -10-357-930-2669 -10-357-930-2669 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-211243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-10878	18 US	419	•	•	39
-10-343-357-17 -10-343-357-17 -10-648-593-115 -10-357-930-20069 -10-357-930-20069 -10-357-930-210071 -10-357-930-210071 -10-357-930-210071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26659 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-11243		2453	•	•	38
-10-343-357-17 -10-343-357-17 -10-48-93-115 -10-357-930-20824 -10-357-930-20824 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-2669 -10-357-930-2669 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-28675 -10-357-930-28675 -10-357-930-28675 -10-357-930-11243 -10-357-930-11243 -10-357-930-41346		427	43.6	395.4	37
-10-343-357-17 -10-343-357-17 -10-648-593-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-27145 -10-357-930-2716 -10-357-930-2	18 US	461	•	•	36
-10-343-357-17 -10-348-393-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20869 -10-357-930-210969 -10-357-930-210971 -10-357-930-210971 -10-357-930-21309 -10-357-930-21309 -10-357-930-21309 -10-357-930-26669 -10-357-930-26615 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-357-930-11243 -10-357-930-11243 -10-357-930-11243 -10-357-930-32416 -10-357-930-32416 -10-357-930-32416 -10-357-930-32416 -10-357-930-32416 -10-357-930-32416 -10-357-930-32416		461	•	•	3 5
-10-343-357-17 -10-648-93-115 -10-648-93-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-357-930-27145 -10-357-930-27149 -10		461			3 4
-10-343-357-17 -10-648-593-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-221307 -10-357-930-221307 -10-357-930-26619 -10-357-930-26615 -10-357-930-26615 -10-357-930-26612 -10-357-930-26612 -10-357-930-26612 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-26615 -10-357-930-27145	18 US	418	•	•	33
-10-343-357-17 -10-343-357-17 -10-648-593-115 -10-357-930-20024 -10-357-930-20069 -10-357-930-210071 -10-357-930-210071 -10-357-930-210071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26669 -10-357-930-26615 -10-357-930-26615 -10-357-930-26912 -10-357-930-27145	S	3332	•	•	32
-10-343-357-17 -10-648-93-115 -10-648-93-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27149 -10		2200	•	٠	31
-10-343-357-17 -10-648-593-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21071 -10-357-930-21071 -10-357-930-21071 -10-357-930-21303 -10-357-930-21307 -10-357-930-22820 -10-357-930-22820 -10-357-930-26815 -10-357-930-27145 -10-357-930-27145 -10-357-930-28675		2966		•	30
-10-343-357-17 -10-343-357-17 -10-64-8593-115 -10-64-8593-115 -10-357-930-20824 -10-357-930-20869 -10-357-930-21097 -10-357-930-21097 -10-357-930-21097 -10-357-930-21307 -10-357-930-21307 -10-357-930-28815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-26815 -10-357-930-27145 -10-		2102	٠	•	29
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20999 Sequence -10-357-930-21071 Sequence -10-357-930-21071 Sequence -10-357-930-21307 Sequence -10-357-930-21307 Sequence -10-357-930-26669 Sequence -10-357-930-26669 Sequence -10-357-930-26815 Sequence -10-357-930-26912 Sequence -10-357-930-26912 Sequence -10-357-930-27149 Sequence -10-357-930-27149 Sequence		5145	•	٠	28
-10-343-357-17 -10-648-593-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20969 -10-357-930-21091 -10-357-930-21091 -10-357-930-21091 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-26815	18 US	5145	•	•	27
-10-343-357-17 -10-343-357-17 -10-648-593-115 -10-648-593-115 -10-357-930-20824 -10-357-930-20869 -10-357-930-21001 -10-357-930-21001 -10-357-930-21303 -10-357-930-21307 -10-357-930-21307 -10-357-930-21307 -10-357-930-28815 -10-357-930-26815		5145	•		26
-10-343-357-17 Sequence -10-648-993-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21071 Sequence -10-357-930-21073 Sequence -10-357-930-21307 Sequence -10-357-930-22820 Sequence -10-357-930-28820 Sequence -10-357-930-26669 Sequence -10-357-930-26669 Sequence -10-357-930-26669 Sequence -10-357-930-266912 Sequence		5145	•	٠	25
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21071 Sequence -10-357-930-21071 Sequence -10-357-930-21307 Sequence -10-357-930-21307 Sequence -10-357-930-21307 Sequence -10-357-930-26659 Sequence -10-357-930-26659 Sequence -10-357-930-26659 Sequence		5145	•	•	24
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21001 Sequence -10-357-930-21001 Sequence -10-357-930-21303 Sequence -10-357-930-21307 Sequence -10-357-930-22820 Sequence -10-357-930-22820 Sequence -10-357-930-2820 Sequence		5145	•	•	23
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-21071 Sequence -10-357-930-21071 Sequence -10-357-930-21083 Sequence -10-357-930-21303 Sequence -10-357-930-21307 Sequence -10-357-930-21307 Sequence -10-357-930-21307 Sequence		5145	•	902.8	22
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-21071 Sequence -10-357-930-21071 Sequence -10-357-930-21303 Sequence -10-357-930-21307 Sequence		5145	•	٠	21
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21071 Sequence -10-357-930-21073 Sequence -10-357-930-21033 Sequence		5145	•	٠	20
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21071 Sequence -10-357-930-21083 Sequence		5145		•	19
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence -10-357-930-21071 Sequence		5145			18
-10-343-357-17 Sequence -10-648-933-115 Sequence -10-357-930-20824 Sequence -10-357-930-20969 Sequence		5145	•	•	17
-10-343-357-17 Sequence -10-648-593-115 Sequence -10-357-930-20824 Sequence		5145	•		16
-10-343-357-17 Sequence -10-648-593-115 Sequence		5145	٠	٠	15
-10-343-357-17 Sequence		4790	•	٠	14
		3766	٠	٠	13
S-10-425-114-26234 Seguence 2	17 US	3625	٠	902.8	12

ALIGNMENTS

```
밁
                                                                       Ś
                                                                                                                     밁
                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-816-494-3; Sequence 3, Application US/09816494; Patent No. US20020034807A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL
TITLE OF INVENTION: PHOSPHATASE MOLECULES
FILE REFERENCE: 10448-030002
                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                            LENGTH: 1998
121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180
                                     61
                                                          61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                                                                                          1 ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                                                                                    99.6%;
                                                                                                                                                                                                 Score 902.8; DB 9; Pred. No. 3.4e-280; 0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                       Length 1998;
                                                                                                                                                                                                   0;
                                                                                                                                                                                                 Gaps
                                     120
                                                                                                                     60
                                                                                                                                                             60
```

```
RESULT 2
US-10-377-072-27
(Sequence 27, Application US/10377072
; Sequence 27, Application US/10377072
; Publication No. US20040009501A1
; GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Rudolph-Owen, Mark J.
APPLICANT: Rudolph-Owen, Mark J.
APPLICANT: Toun, Miyoung
APPLICANT: Toun, Miyoung
APPLICANT: Tosi, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                           841
                                                                                                                                                                                                                                                                                                                                                                                 901
                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCAGAATGGGATTGGTTATAGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĊTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAAGGTAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCGATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: MPI03-018OMNIM
CURRENT PILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR PILING DATE: 2000-05-29
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2000-03-07
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR FILING DATE: 2001-05-21
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION DATE: 2001-03-23
PRIOR SEQUENCE: 2001-03-23
PRIOR APPLICATION DATE: 2001-03-23
PRIOR SEQUENCE: 2001-03-23
PRIOR APPLICATION DATE: 
                       δ
                                                               片
                                                                                           Ś
                                                                                                                                     밁
                                                                                                                                                                   Ş
                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo
FEATURE:
                         481
                                                               421
                                                                                               421
                                                                                                                                       361
                                                                                                                                                                                                                 301
                                                                                                                                                                           361
                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Similarity
CGAATTCCTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                         ACTOTAGTOCOTACOTGCATTTCTCAGCOTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                               GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 902.8; DB 17
Pred. No. 3.4e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
```

360 420 420 300

240 300

360

180

120 120 60

0,

240

```
APPLICANT: MILIAMISON, MAIX O.
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: T881, Fong-Ying
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND
TITLE OF INVENTION: AND USES THEREFOR
TILE REPERENCE: MP103-0180MIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT PILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-06-29
PRIOR PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 09/861,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 3
US-10-377-072-27
; Sequence 27, App
; Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
FILING DATE: 2001-03-22 ning Prior Application data removed R OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10377072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      906
                  See
                File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND 49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                          á
                                                                     밁
                                                                                                     S
                                                                                                                                          밁
                                                                                                                                                                      ঠ
                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                          g
                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           묽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ
SEQ ID NO 27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH:
 841
                               841
                                                                       781
                                                                                                                                                                              721
                                                                                                                                                                                                                 199
                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                        601
                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1998
ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATAAGAAC
                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAGGTGGGTTTGCTGAAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTOTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGCTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 902.8; 1
Pred. No. 3.4e
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; DB 18;
3.4e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1998;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
 900
                                 900
                                                                       840
                                                                                                          840
                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                              780
                                                                                                                                                                              780
                                                                                                                                                                                                                   720
                                                                                                                                                                                                                                                     720
                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
```

906

120

. 300

360

300

240 180 180

```
APPLICANT: Lepley, Denise M.

APPLICANT: Rieger, Daniel K.

APPLICANT: Burgess, Catherine E.

TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258

CURRENT EILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR PILLING DATE: 2001-01-30
PRIOR PILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                      Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIN Ver. 2.1
SEQ ID NO 257
LENGTH: 2071
TYPE: DNA
ORGANIEM: Homo sapiens
US-10-072-012-257
                        Ś
                                                                                                                                                                                                        PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 4
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                            Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 257, Application No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patturajan,
                                              99.6%;
ilarity 99.8%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Application US/10072012 b. US20040033493A1
                                            Score 902.8; DB 17;
Pred. No. 3.4e-280;
0; Mismatches 2;
                                                                                                                                                                                              See File Wrapper or
                                              Indels
                                                                     Length
                                            0;
                                                                                                                                                                                                PALM
                                            Gaps
                  60
                                            0
                                                                                                          RESULT 5
US-10-168-506-2
                                                                                                                                                                                       δ
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                        뭐
                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δÃ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                          901
                                                                                                                                                                  961
                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                               841
                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61
MARTINEZ, RICARDO
WHYTE, DAVID
MANNING, GERARD
SUDARSANAM, SUCHA
                                                                                                                                                                                 CAGACT 906
                                                                                                                                                                CAGACT
                                                                                                                                                                966
```

```
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MARTINEZ, RICARDO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAAGACCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTATCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĊĀĠĊĀĠĀĀTĠĠĠĀŦŦĠĠŦŦĀŦĠŦĠŦŦĀĀĀŦĠĊĊĀĠĊĀĀŦĀĊĊŦĠŦĊĊĀĀĀĠĊĊŦĠĀĊŦŦŦ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGGTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTITGGAAGCCATTAATAICAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
```

960 900

840 900

840

```
APPLICANT: HILL, RON
APPLICANT: PLANAGAN, PETER
APPLICANT: PLANAGAN, PETER
TITLE OF INVENTION: WAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
UNDBER OF SEQ ID NOS: 76
SOFTWARE: PATENTIN VET. 2.1
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; LENGTH: 2732
; TYPE: DNA
; ORGANISM: HOMO β
US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                           र्
                  밁
                                                ঠ
                                                                            음 성
                                                                                                                                 문
                                                                                                                                                                 ક
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     श्च
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 99.6%;
Best Local Similarity 99.8%;
Matches 904; Conservative
                                                                                                                                             1138
                                                                                                                                                                                                     1078
                                                                                                                                                                                                                                                             1018
                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                     958
                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                              898
                                                                                                                                                                                                                                                                                                                                                                                                                                       838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                       CAGCAGAATGGGATTGGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCGCTATCGCTATCGCCTACATCATG
                                                                                                                                             ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                   CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                           CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCCTATCGCCTACATCATC
                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 902.8; DB 17;
Pred. No. 4.1e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2732;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
840
                                                                                                                 720
                                                                                                                                                                                                                                                             1077
                                                      780
                                                                                    1257
                                                                                                                                          1197
                                                                                                                                                                                                   1137
                                                                                                                                                                                                                                                                                                                   1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                         1317
                                                                                                                                                                        660
                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                            957
                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                       897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 597
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
```

```
Sequence 1, Application US/10257026

| Sequence 1, Application US20040086859A1
| GENERAL INFORMATION:
| APPLICANT: Merck Patent GmbH
| TITLE OF INVENTION: New dual specificity phosphatase
| FILE REFERENCE: DUSP10KDMS
| CURRENT APPLICATION NUMBER: US/10/257,026
| CURRENT FILING DATE: 2003-11-07.
| NUMBER OF SEQ ID NOS: 3
| SOFTMARE: Patentin Ver. 2.1
| SEQ ID NO 1
| LENGTH: 3059
| TYPE: DNA
| ORGANISM: Homo sapiens
| FEATURE:
| NAME/KEY: CDS
| LOCATION: (127)..(2121)
                  δ
                                                   밁
                                                                     S
                                                                                                뮵
                                                                                                                            5
                                                                                                                                                              밁
                                                                                                                                                                                ঠ
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 6
US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 99.6%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1438
                                                                                                         487
                        481
                                                    547
                                                                              421
                                                                                                                                   361
                                                                                                                                                              427
                                                                                                                                                                                         301
                                                                                                                                                                                                                   367
                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                         307
                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                             247
                                                                                                                                                                                                                                                                                                                                                          121
                                                                                                                                                                                                                                                                                                                                                                                     187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            841
                                                                                                                                                                                                                                                                                                                                                                                                                                           127
                                                                                                                                                                                                                                                                                                                                                                                    1 ATGCCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                         CTTGCAGGTGGGTTTGCTGAGGTTCTCTCTGTTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                               GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCCATGAGATGGTTGGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score 902.8; DB 17; Length 3059; Pred. No. 4.3e-280; O; Mismatches 2; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                           186
                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1437
                                                                                                          546
                                                                                                                                                                                                                    426
                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                         366
                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                               306
                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1377
                                                    909
                                                                                                                                                               486
                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                     246
```

```
Sequence 1, Application US/09964277
; Retent No. US2020137170A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHC
; TITLE OF INVENTION: DSP-16 US/09/964,277
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT FILLING DATE: 2001-09-25
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3496
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-277-1
     S
                            밁
                                                    S
                                                                                片
                                                                                                    S
                                                                                                                                  밁
                                                                                                                                                         Ś
                                                                                                                                                                                    밁
                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 7
US-09-964-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                         Matches 904;
                                                                                                                                                                                                                                                                                                     Query Match
Best Local (
                               802
                                                                                 742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1027
                                                      241
                                                                                                        181
                                                                                                                                   682
                                                                                                                                                                                    622
                                                                                                                                                          121
                                                                                                                                                                                                                                        562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       967
                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    667
                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                                                     Similarity
                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                           TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCT
                                                                                                                            CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAGTGCACTGTTAGCTGGGATCTCCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCAGAATGGGATTGGTTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1032
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             906
                                                                                                                                                                                                                                                                                                 99.6%;
                                                                                                                                                                                                                                                                                   Score 902.8; DB 9;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHOSPHATASE
                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                              3496;
                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                     Gaps
 360
                                                   300
                         861
                                                                            801
                                                                                                    240
                                                                                                                                                      180
                                                                                                                              741
                                                                                                                                                                                681
                                                                                                                                                                                                                                  621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               726
                                                                                                                                                                                                                                                                                     0
```

```
APPLICANT: BODARY, SARAH C.
APPLICANT: CLARK, HILLARY
APPLICANT: CLARK, HILLARY
APPLICANT: ERISDELL, HUNTE
APPLICANT: SCHOENFELD, JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, D. MICKEY
APPLICANT: WU, THOMAS D.
TITLE OF INVENTION: Compositions and Methods for
TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT FILING DATE: 2003-02-21
INUMBER OF SEQ ID NOS: 742
ISEQ ID NO 261
LENGTH: 3521
TYPE: DNA
ORGANISM: Homo sapien
                                                           US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                RESULT 8
US-10-370-715B-261
(Sequence 261, Application US/10370715B
Publication No. US20040258678A1
GENERAL INFORMATION:
Patin Docket Preview
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
  Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCCGCTCCGCCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG 1101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                99.6%;
Score 902.8; DB 18
Pred. No. 4.7e-280;
0; Mismatches 2;
                             DB 18;
                                                                                                                                                                                                    for the Treatment of Immune
  Indels
                            Length
                             3521;
 0,
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1041
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          921
 0
```

```
RESULT 9

US-09-816-494-1
US-09-816-494-1
; Sequence 1, Application US/09816494
; Patent No. US20020034807A1
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel A.
; TITLE OF INVENTION: 38692 AND 21117,
                                                                                                               음 성 음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                         유정
                                                                                                                                                                                                                                                                                                8 8 8 8
                                                                                                                                                                                                                                                                                                                                                                                             유왕
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유 성 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유 &
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                               1464
                                                                                                                                                                                                                                                                                                         1224
                                                                                                                                                                                                                                                                                                                                                       1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                    1044
                                                                                                                                                                                                                                                                                721
                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                         CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACCTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                               CAGACT 1469
                                                                                                                                     CAGACT 906
                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                       CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCGCTATCGCCTACCATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                              ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NOVEL DUAL SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                          1343
                                                                                                                                                                                                                                                                                                                                                                                                     1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1043
                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                               720
                                                                                                                                                                                                                                                                                                                                                       1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FILE REFERENCE: 10448-030002
; FILE REFERENCE: 10448-030002
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3544

TYDE: DNA
                                  5
                                                          유 성
                                                                                                     문
                                                                                                                             Ş
                                                                                                                                                          문
                                                                                                                                                                            S
                                                                                                                                                                                                  밁
                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                뮹
                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; LOCATION: (
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 904; Conser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: DNA
ORGANISM: Homo sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               E OF INVENTION: PHOSPHATASE MOLECULES REFERENCE: 10448-030002
                                                                                                              1189
                                                                                                                                                            1129
                                                                                                                                                                                                           1069
                                                                                                                                                                                                                                                          1009
                                        721
                                                                                      661
                                                                                                                                    601
                                                                                                                                                                                   541
                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                       889
                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                      829
                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                    769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ
                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACCATCATCATCATG
                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                          CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                     ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (2583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 902.8; DB 9;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
```

1308

1188

660

1248

540

1068

480

1008

420

888

180 768 240

360

```
APPLICANT: WILLHAMMSUI, MALY MALIANIS APPLICANT: Chun, Miyoung APPLICANT: Chun, Miyoung APPLICANT: Chun, Miyoung APPLICANT: TSal, Fong-Ying TTILE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES TITLE OF INVENTION: AND USES THEREFOR FILE REFERENCE: MPIO3-01800MNM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-06-29
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMB
                                            멼
                                                                         S
                                                                                                                                                                                                            ; NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                           SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo S
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 10
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      믕
                                                                                                                   Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 25, Application US/10377072 Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                       ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGACGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura
                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         906
                                                                                                                                              99.6%;
                                                                                                                        0;
                                                                                                                   Score 902.8; DB 17;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                              DB 17;
                                                                                                                        Indels
                                                                                                                                                           Length
                                                                                                                   0;
                                                                                                                   Gaps
                                   648
                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                   0
      Sequence 25, Application US/10377072
Publication No. US20040157221A9
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals In-
APPLICANT: Curtis, Rory A.J.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Rudolph-Owen, Laura A.
                                                                                                                                                                                                                       RESULT 11
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1009
                                                                                                                                                                                                                                                                                                                                                                                                                                      841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A
                                                                                                                                                                                                                                                                                                                                                      CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                  ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTATCATG
                                                                                                                                                                                                                                                                                                        CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGGTTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                  906
```

900

1428

840

1368

780

1308

720 1248 660

1188

600

1128

1068

1008

420 948 888 300 828

768 180 708 120

```
APPLICANT: Chun, Miyoung
APPLICANT: T8ai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46509, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 46937, 49931, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
THE OF INVENTION: 38692, 46509, 4693, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46509, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 46932, 4693
                                                                                                    ঠ
                                                                                                                                                                  밁
                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             श्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; REATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2586)
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match 99.6%;
Best Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 2000-05-19
APPLICATION NUMBER: US 09/816,494
FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
421
                                                     949
                                                                                                          361
                                                                                                                                                                     889
                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                   829
                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                        CTTGCAGGTGGGTTTTGCTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                   Score 902.8; DB 18;
Pred. No. 4.7e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                             420
                                                                                                                                                                     948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               648
480
                                                  1008
                                                                                                                                                                                                                           360
                                                                                                                                                                                                                                                                                888
                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               708
```

```
APPLICANT: Zhou, Yihua

APPLICANT: Kovalic, David K.

APPLICANT: Screen, Steven B

APPLICANT: Tabaska, Jack E

APPLICANT: Tabaska, Jack E

APPLICANT: Tabaska, Jack E

APPLICANT: Cao, Yongwei

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement

FILE REFERENCE: 38-21 (53313) B

CURRENT APPLICATION NUMBER: US/10/425,114

CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 73128

SEQ ID NO 26234

LENGTH: 3625
밁
                       á
                                                        밁
                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                    Matches 904;
                                                                                                                                                  Query Match
                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                      Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1489 CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             481
                         61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGTGGCTCTGCTGGAA 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                   99.6%;
ilarity 99.8%;
Conservative
                                                                                                                    0
                                                                                                                 Score 902.8; DB 1/;
Pred. No. 4.8e-280;
"Mismatches 2;
                                                                                                                                                 DB 17;
                                                                                                                    Indels
                                                                                                                                               Length 3625;
                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                          751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1428
811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1068
```

```
RESULT 13
US-10-343-357-17
; Sequence 17, Application US/10343357
; Publication No. US20040058341A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1052
                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    872
T: INCYTE GENOMICS, INC.; TANG, Y.Tom
T: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
TT: YAO, Monique G.; BURFORD, Neil
TT: WANG, Yumei E.; STEWART, Elizabeth A.
TT: GANDHI, Ameena R.; ARVLZU, Chandra S.
TT: LEE, Ernestine A.; HAFALIA, April J.A.
TT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
TT: GRIFFIN, Jennifer A.; BAUGHN, Mariah R.
TT: YUE, Henry; WARREN, Bridget A.
TT: NGUYEN, Danniel B.; CHAMLA, Narinder K.
TT: KEARNEY, Liam
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                         CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCCAMACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCGTGGTTGGACAAATCAGTAGAATTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 crrecaderederried in a contract contrac
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1597
                                                                                                                                                                                                                                                                                                                                                                                                                                     906
                                                                                     3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1051
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             931
                                                      Ş
                                                                                                                                Ş
                                                                                                   문
                                                                                                                                                                                    В
                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                              뫄
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
```

```
FILE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
CURRENT FILING DATE: 2003-01-28
FRIOR APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2003-07-28
FRIOR APPLICATION NUMBER: US 60/221,679
FRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-08-03
FRIOR APPLICATION NUMBER: US 60/224,309
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-18
PRIOR FILING DATE: 2000-08-30
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
SOFTWARE: PERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: PERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
PRIOR FILING DATE: 2000-09-08
SOFTWARE: DERL PROGRAMMER: US 60/231,366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ) OTHER INFORMATION OF THE US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 904; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CB1
       1078
                                                                                                       1018
                                                                                                                                                       481
                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                              898
                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                           361
                                                                                                                                                                                                                                                                                                                                                                                                             838
                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    904;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          _
                             CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                 ACTOTAGTOCOTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                   CTIGCAGGIGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAAGGTTCTCTCTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 902.8; DB 17
Pred. No. 4.9e-280;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
```

480 1017 540 1077 600 420 957

897

837 360

```
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NO: 557
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 115
LENGTH: 4790
TYPE: DNA
ORGANISM: Homo sapiens
US-10-648-593-115
                                                             밁
                                                                                               ঠ
                                                                                                                                        밁
                                                                                                                                                                  ঠ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 14
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 115, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity 99.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1438
                                                                                                                                                                                                                    304
                           301
                                                                                                     241
                                                                                                                                          364
                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                               244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                 424
                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                         184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  781
                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                              _
                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAAGCCTCCAATGGATGTGTT
                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                         ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Application US/10648593
o. US20040106132A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 902.8; DB 18;
Pred. No. 5.6e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4790;
                                                                                                                                                                                                                                                                                                                                                                                                                                                  ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                       243
                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1437
                           360
                                                               483
                                                                                                     300
                                                                                                                                          423
                                                                                                                                                                              240
                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                               303
                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AND/OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               THAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 20824, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                               APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1084 CAGACT 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   484 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACCATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                          THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
```

```
δ
                                        밁
                                                      8
                                                                        망
                                                                                           & 유
                                                                                                                                5
                                                                                                                                                         밁
                                                                                                                                                                       8
                                                                                                                                                                                         밁
                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                     В
                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; NAME/KEY: misc_feature
; LICATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match 99.6%;
Best Local Similarity 99.8%;
Matches 904; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 20824
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                                                              1309
                                                                                                                   1249
                                                                                                                                                         1189
                                                                                                                                                                                               1129
     1429
                                         1369
                                                                                                                                                                                                                                     1069
                                                                                                                                                                                                                                                                           1009
                      841
                                                                                                                                                                            601
                                                          781
                                                                                                                                      661
                                                                                                                                                                                                                 541
                                                                                                 721
                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                 949
                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                      889
                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 780
                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                           CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                  CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                        CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 540
                                                                                                                                                                                                                                                                                                             CTTGCAGGTGGGTTGCTGAGTTCTCTCGTTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                      GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                           Score 902.8; DB 18
Pred. No. 5.9e-280;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
  1488
                                                        840
                                                                            1368
                                                                                                                                     720
                                                                                                                                                                                             1188
                                                                                                                                                                                                              600
                                                                                                                 1308
                                                                                                                                                       1248
                                                                                                                                                                          660
                                                                                                                                                                                                                                   1128
                                                                                                                                                                                                                                                                         1068
                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                               1008
                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                          888
                                                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

```
Qy 901 CAGACT 906
||||||
Db 1489 CAGACT 1494
```

Search completed: February 15, 2005, 15:52:33 Job time : 553.782 secs

```
Sequence 1, Application US/09816494

PATENT NO. 6664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPE

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES

FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTMARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                    RESULT 1
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3079
1896
247
205
187
128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     eeq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gapop 60.0 , Gapext 60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-108
5450
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1202784 ведв,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             February
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34.6
34.6
3.5
3.4
2.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Issued Patents NA:*

| Godd | 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    gaaaagaagacgaggag.....ctgattccagaacacacaag
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3544
1998
279
333
378
259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             15,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GenCore version 5.1.6 (c) 1993 - 2005 Compugen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           818138359
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-816-494-1
US-09-816-494-3
US-09-016-434-91
US-09-513-999C-2877
US-09-513-999C-3684
US-09-513-999C-24342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    11.51:38 ; Search time 823 Seconds (without alignments)
10835.611 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           residues
                                                                                                                                                                                                                 L SPECIFICITY
USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     σ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1, Appli
3, Appli
91, Appl
91, Appl
2877, Ap
3684, Ap
24342, A
                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                 밁
                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
```

Minimum Maximum

Word size

Database

Result No.

```
; LENGTH: 3544
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 3299; Conserv
                                                                   1013
                                                                                                         1004
1073
                                                                                                                                         953
                                                                                                                                                                            944
                                                                                                                                                                                                                893
                                                                                                                                                                                                                                                    884
                                                                                                                                                                                                                                                                                                                           824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGGGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                     833
                                                                                                                                                                                                                                                                                                                                                             773
                                                                                                                                                                                                                                                                                                                                                                                                  764
                                                                                                                                                                                                                                                                                                                                                                                                                                  713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGCTGGCTGCTAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                    CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072
                                                                                                                                                                                                   ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCTCGTTGTTTTCCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                          CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                   CATCCCACATTTTGGAAGCCATTAAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGCTGGCTGCCCAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                       AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                           AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                    CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                           AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                  AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               56.5%;
nilarity 99.9%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Score 3079; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 3544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                         1063
                                                                                                                                            1012
                                                                                                                                                                              1003
                                                                                                                                                                                                                    952
                                                                                                                                                                                                                                                                                                                           883
                                                                                                                                                                                                                                                                                                                                                                                                  823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             283
                                                                                                                                                                                                                                                       943
                                                                                                                                                                                                                                                                                       892
                                                                                                                                                                                                                                                                                                                                                               832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            583
```

*
1113 ACTITANCECCAMATEGRATIC CONTINUES CONTINUE
8
3 3 3 3 3 3 3 3 3 3 2 2 2 2 2 2 2 2 2 2
2214 GCCACTCCGATATCTTFGCCCCCCAGACCTTCCCTTACCAGCAGCAGCTGGTATT 2263 2213 ITTCCCACAGACTCCTACCTTCCCCTTACCAGCAGCAGCTGGTATT 2273 2214 ITTCCCACAGACTCCTACACTTCCCCTTACCAGCAGCAGCTGGTATT 2273 2213 ACTCTCCCTTACACTCCCACTTCCCACTTCCCCCTTACCAGCAGCAGCTGCCACTT 2272 2214 ACTCTCCCTTACACTCCCACTTCCACTTCCCACTTCCCACTTCCACTTCCCACTTCCACTTCCACTTCCACTTCCACTTCCACTTCCACTTCCACTTCCACAAAAAA

Qy 958 ACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1017	Qy 898 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAAATCC 957	Qy 838 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 897	Qy 778 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 718 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 777	Qy 658 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 717	Qy 598 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 657	Qy 538 ATGGCCCATGAGATTGGTACTCAAATTGTTACTGATGGTGGTGGCTCTGCTGGAA 597	Query Match 34.8%; Score 1896; DB 4; Length 1998; Best Local Similarity 99.9%; Pred. No. 0; Matches 1996; Conservative 0; Mismatches 2; Indels 0; Gaps 0;	w s z	0 .		GENERAL INFORMATION: APPLICANT: MEYERS, Rachel A. TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR	RESULT 2 US-09-816-494-3 ; Sequence 3, Application US/09816494 ; Parent No. 6664089	3523 AA		3403 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGTA	DD 3343 CTTCTCAGCTTTATGAAGAGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3402 OV 3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
Db Oy	Db 49	. B &	S B 8	S & &	B 8	⊋ ₽ Q	B 5	S B 8	рь Q у	Db Qq	Db Oy	Oy Db	p &	D Q	Db Qq	Db Qy	Db	S B
2038 TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 2097		Contract Contract	21	98 TCCTCATCAGAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC	38 TOTOTSCALAR CARACTERITICATE CASC CASCATSCALAR CATACATSCALAR CATACATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATACATSCALAR CATAC	78 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCATAAGCTCAAGCGTTCCTTC		TIGNOCIACIT TIGNIACITE CONTROL ACAGEGRA ANAGEGRA CONTROL CONTR	98 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC	1438 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497	1378 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1437 	1318 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1258 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG 1317	1198 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 1257 	1138 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1197	1078 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 1137	481 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG 540	421 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 480 1018 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAAGGAGTGTCCTCAACAATGGAGCTGATA 1077

```
RESULT 3
US-09-016-434-91
            CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
CLASSIFICATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: PA-00
REFERENCE/DOCKET NUMBER: PA-00
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 91:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 91 Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
COMPUTER: IBM PC COMPATIBLE
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
 SEQUENCE
                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/016,434
FILING DATE: HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
                                                                                                                                                                                                                                                                                                                                                                                                             CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                             COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                               STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     91, Application US/09016434
o. 6500938
                                                                                                                                                                                                                                                                                                                                                                                94304
CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCATTGAGGTCTCCTGA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCATTGAGGTCTCCTGA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AAGCAGTTTAAACGCAGAAGCTGCCAAATTGGAATTTGGAGAGAGCATCATGTCAGAGAAC 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC 2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                          3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                               USA
                                                                                  PA-0002
                                                                                  SS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2157
```

```
RESULT 4
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-016-434-91
                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Dunas Milne Edwards, J.B.
APPLICANT: Duclett, A.
APPLICANT: Giordano, J.Y.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
PILE REFERENCE: 59. USZ.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR PILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                                                          NUMBER OF SEQ ID NOS:
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2877, Application US/09513999C Patent No. 6783961 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                             FEATURE:
NAME/KEY: misc_feature
TON: 19
NAME/KEY:
                                                                                                                                                    LOCATION: 17
OTHER INFORMATION: h=a
FEATURE:
                                        LOCATION: 19
OTHER INFORMATION: k=g
                                                                                                     LOCATION: 18 OTHER INFORMATION: y=c
                                                                                                                                                                                          FEATURE: misc_feature
                               FEATURE:
                                                                                                                                NAME/KEY: misc_feature
                                                                                                                                                                                                                                 NAME/KEY: CDS
LOCATION: 127..333
                                                                                                                                                                                                                                                                               ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                               TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRANDEDNESS: singl.
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: LUNGFET03
CLONE: 1234795
                                                                                                                                                                                                                                                                 FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
nes 247; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      694
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      574 GAGAGGTTGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         754 GCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         514 GGGAAAAGAGGACTTATTGTTGTCATGGCCCCATGAGATGATTGGAACTCAAATTGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 GGGAAAAGAGACTTATTGTTGTCATGGCCATGAGATGATTGGAACTCAAATTGTTACT
misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTATGAAGCGAACGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GAGAGGTTGGTGGCTGGTGGAAAGTGGAAAGTGCTGCTAATTGATAGCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCATTTGTGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        760
                                                                                                                                                                                                                                                                                                                                                           36681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4.5%; Score 247; DB 4; L
100.0%; Pred. No. 7.2e-113;
                                                                                                      ç
                                            õ
                                                                                                                                                                    or
c
                                             ct
                                                                                                                                                                    or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 279;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    753
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                693
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             633
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
TITLE OF INVENTION: Expressed Sequence Tags and Enc. Fatent No. 6783961
FALER REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
FRIOR APPLICATION NUMBER: US 60/122,487
FRIOR FILING DATE: 199-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 3684
LENGTH: 378
LENGTH: 378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 5
US-09-513-999C-3684/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ર્ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; OTHER INFORMATION: Xaa=His or Gln US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 3684, Application US/09513999C Patent No. 6783961
Query Match 3.4%; Score 187; DB 4; 1
Best Local Similarity 100.0%; Pred. No. 8.3e-83;
Matches 187; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 255; Conservative
                                                                OTHER INFORMATION: -09-513-999C-3684
                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Dumas Milne Edwards, J.B. APPLICANT: Duclert, A. APPLICANT: Giordano, J.Y.
                                                                                                                                          ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: 216..377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NAME/KEY: UNSURE LOCATION: 37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
LOCATION: 237
OTHER INFORMATION: w=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: 58
OTHER INFORMATION: r=a
                                                                                             FEATURE:
NAME/KEY: misc_feature
LOCATION: 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             648 CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTTCACCTGCTTGCA 903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                       Duclert, A. Giordano, J.Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTTCACCTGCTTGCA 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWAGCTCCCAAGATGTTGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAG
                                                                              k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ₩≡a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3.8%;
                                                                              ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 205; DB 4
Pred. No. 8e-92;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4;
                                 DB 4; Length 378;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1;
                                                                                                                                                                                                                                                                                                                                                                            Encoded Human Proteins
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 333;
    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
   <u>..</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             887
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               707
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
   0
```

Search completed: February 15, Job time : 824 secs

2005,

21:20:50

```
S
                                                       밁
                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
문
                                                                                                                   밁
                                                                                                                                              S
                                                                                                                                                                                                                                            ; OTHER INFORMATION: n=a, g, c US-09-513-999C-24342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-09-513-999C-24342; Sequence 24342, Application US/09513999C; Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 24342
LENGTH: 259
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and Encoded Human Proteins.
Patent No. 6783961
                                                                                                                                                                               Query Match
Best Local Similarity
Matches 128; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                          FILE REFERENCE: 59.US2.REG
CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature LOCATION: 230
                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens FEATURE:
                                                                                                                                                 4978
                            5098
                                                                                       5038
                                                                                                                     102
                                                          162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               378
222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             581
                                                                             GTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGT
ATGTATGA
                          ATGTATGA 5105
                                                          GTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATAAGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGGAATACAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGGTGGCTCTGCTGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTG
                                                                                                                                                                              2.3%; Score 128; DB 4; I
llarity 100.0%; Pred. No. 2.9e-53;
Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         767
. 229
                                                                                                                                                                                                                                                           ဝူ
                                                                                                                                                                                                            Length 259
                                                                                                                                                                                 Indels
                                                                                                                                                                                 0
                                                                                                                                                                                 Gaps
                                                                                       5097
                                                                                                                                                   5037
                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               319
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             640
                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     259
                                                                                                                                                                               0
```

This Page Blank (uspto)

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                Regul
No
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Total number of hits satisfying chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Word size
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM nucleic
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Searched:
                                                                                                                                                                                                                                                                                                                                             Pred. No. is the nu score greater than and is derived by \epsilon
                                                                                                                                                                                                                                              Score
        44113
44413
44413
44413
44413
44413
44413
44413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                Published Applications NA:*

1: /cgn2_6/ptodata/1/pubpna/USO7_PUBCOMB.seq:*

2: /cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*

3: /cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*

4: /cgn2_6/ptodata/1/pubpna/USO6_NEW_PUB.seq:*

6: /cgn2_6/ptodata/1/pubpna/USO8_NEW_PUB.seq:*

7: /cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*

8: /cgn2_6/ptodata/1/pubpna/USO8_PUBCOMB.seq:*

9: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

10: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

11: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

12: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

13: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

14: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

15: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

16: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

17: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

18: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

19: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

20: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

21: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*

22: /cgn2_6/ptodata/1/pubpna/USO9E_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                           is the number of results predicted by chance to have a ater than or equal to the score of the result being printed, rived by analysis of the total score distribution.
                                                                                                                                                                                                                                              Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OLIGO_NUC
Gapop_60.0 , Gapext 60.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-108
5450
1 gaaaagaagacgaggaggag...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           February 15, 2005, 15:22:58; Search time 2769 Seconds (without alignments)
11613.401 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5378673 seqs, 2950229984 residues
        81.0
81.0
81.0
81.0
81.0
81.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                              Length
        GenCore version 5.1.6 (c) 1993 - 2005 Compugen
    US-10-357-930-20824

US-10-357-930-21071

US-10-357-930-211071

US-10-357-930-21103

US-10-357-930-21303

US-10-357-930-21307

US-10-357-930-26669

US-10-357-930-26612

US-10-357-930-26912

US-10-357-930-26912
                                                                                                                                                                                                                                                H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     summaries
                                                                                                                                                                                                                                                                                                          SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ....ctgattccagaacacacaag
                                                                                                                                                                                                                                              Description
                      Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
        Sequence
      20824,
20969,
21071,
21083,
21303,
21307,
22820,
26669,
26669,
26815,
26912,
                                                                                                                                                                                                                                                                                                          ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0000
        81.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

78.0

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      11.0
11.0
9.9
9.9
9.9
9.9
7.6
7.6
7.6
      \begin{array}{c} 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.55 \\ 2.
                                                                                                                                                                                                                                                18 US-10-357-930-27145
18 US-10-357-930-27145
18 US-10-357-930-27145
18 US-10-357-930-27145
18 US-10-357-930-28675
19 US-10-343-357-17
17 US-10-448-593-115
18 US-10-377-972-25
18 US-10-377-072-25
18 US-10-377-072-25
18 US-10-377-072-25
18 US-10-377-072-25
18 US-10-377-072-25
19 US-10-377-072-27
10 US-10-296-115-520
10 US-10-296-115-520
10 US-10-377-072-27
10 US-10-104-047-1750
10 US-10-104-047-114-266
10 US-10-104-104-26-24
10 US-10-104-26-24
10 US-10-104-26-26
10
Sequence 27145, A
Sequence 27145, A
Sequence 28675, Ap
Sequence 28675, App
Sequence 115, Appli
Sequence 1, Appli
Sequence 2, Appli
Sequence 25, Appli
Sequence 261, Appli
Sequence 261, Appli
Sequence 27, Appli
Sequence 20, Appli
Sequence 27, Appli
Sequence 14726, Appli
Sequence 14720, Appli
Sequence 1772, Appli
Sequence 1772, Appli
Sequence 1771, A
```

```
片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 62232

SOFTWARE: FASTSEQ for Windows
SEQ ID NO 20824

LENGTH: 5145

TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145

OTHER INFORMATION: n = A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR PILING DATE: 2000-02-17

PRIOR PILING DATE: 2000-03-16

PRIOR PILING DATE: 2000-03-16

PRIOR PILING DATE: 2000-03-16

PRIOR PILING DATE: 2000-03-16

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR PILING DATE: 2000-06-09

PRIOR PILING DATE: 2000-07-18

PRIOR PILING DATE: 2000-07-18

PRIOR PILING DATE: 2000-07-18

PRIOR PILING DATE: 2000-12-13

PRIOR PILING DATE: 2000-12-13

**NUMBER: 60/255,281

PRIOR PILING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 1
US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 4683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 20824, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
                                                                 473
                                                                                                                                                                                                                                                                                                                                                                                                                         4683;
                                                                                               464
                                                                                                                                                                                             353
                                                                                                                                413
                                                                                                                                                                404
                                                                                                                                                                                                                              344
                                                                                                                                                                                                                                                                                               284
                                                                                                                                                                                                                                                                                                                            233
                                                                                                                                                                                                                                                                                                                                                             224
                                                                                                                                                                                                                                                                                                                                                                                           173
                                            ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGCTTATTG
                                                                                       AGT CACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                           GAGAAAGAGACATTCACTTGGAGGGCTCTTGGTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                          Similarity
                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                           AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTTGAGCCTTTTGAGC
                                                                                                                                                      ĠAGAAAGAĠĀĊĀTTĊĀĊTTĠĠĀĠĠĊTĊTTĠĊTĠĀĀĀĀTĠĠĠŦŦTĀĀĊTĊTĊĊŦŦŦŦĠĊĊ
                                                                                                                                                                                                                     ATCAAATGTGAGGGGTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                      CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                    GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                       GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 232
                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                        81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A,T,C or
                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                   Score 4413; DB 18;
Pred. No. 0;
0; Mismatches 3;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       G
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                  5145;
                                                                                                                                                                                                                                                                                                                                                                                                                   ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FOR
THERAPY
                         583
                                                        532
                                                                                       523
                                                                                                                       472
                                                                                                                                                        463
                                                                                                                                                                                       412
                                                                                                                                                                                                                       403
                                                                                                                                                                                                                                                                                      343
                                                                                                                                                                                                                                                                                                                                                    283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Q
                                       밁
                                                                                                                                Ś
                                                                  S
                                                                                                   B
                                                                                                                                                                    밁
                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                    1544
                                                                                                                                                                                                                                 1424
                                                                                                                                                                                                                                                                                                 1364
                                                                                                                                                                                                                                                                                                                                1313
                                                                                                                                                                                                                                                                                                                                                                  1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1193
                                                                                                                                                                                                                                                                                                                                                                                                                               1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        764
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         713
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         704
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       644
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        584
GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                   CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGGCATCCCGCCA
                                                                                                                      CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                                                                                                             CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432
                                                                                              CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTC
                                                                                                                                                               AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC
                                                                                                                                                                                          AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCCACCTGGAGAAGC 1492
                                                                                                                                                                                                                            CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA
                                                                                                                                                                                                                                                                                                                                                         GIGITCIAGIGCACIGITTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA
                                                                                                                                                                                                                                                                                                                                                                              GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312
                                                                                                                                                                                                                                                                                          TTTTGCCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072
                                                                                                                                                                                                                                                                                                                                                                                                                                             TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTITATCCCCGAGICTCATITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCTGCTTGCAGGTGGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                             1612
1672
                                                                                                                              1552
                                                                                                                                                                                                                                                                                            1423
                                1663
                                                                                               1603
                                                                                                                                                               1543
                                                                                                                                                                                                                                                                                                                                                           1363
                                                                                                                                                                                                                                                                                                                                                                                                                         1303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     892
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   823
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 643
```

밁 S 뭐 5 밁 Ś В S

청 유

성 유

뮍

```
4673
                                                                                                                                                                                                                   4663
                                                                                                                                                                                                                                                4613
                                                                                                                                                                                                                                                                              4603
                                                                                                                                                                                                                                                                                                                                        4543
                                                                                                                                                                                                                                                                                                           4553
                                                                                                                                                                                                                                                                                                                                                                       4493
                                                                                                                                                                                                                                                                                                                                                                                                     4483
                                                                                                                                                                                                                                                                                                                                                                                                                                  4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                               4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3833
 TEGCTEG
                                             GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                 GCGAAGGGGTGGCCT
                                                                                                   AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                               TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                  TAGGGCTTCTTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                             TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                              TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                        GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                         GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                  GCTATGATGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ccdactriggriangegeargargageegeaeaeaecreaetagtrigtgeaeaaataatgr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTCGTATCTCAGGTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGGACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TATCAGCTACAGTGTGGGTCCTCTTTTGAAGCCTTTAATTCACAACAGCAGCTTTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTTGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAAGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA
4859
                         CGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                      4852
                                                                                                                                                                             4732
                         4902
                                                                                     4842
                                                                                                                   4792
                                                                                                                                               4782
                                                                                                                                                                                                            4722
                                                                                                                                                                                                                                           4672
                                                                                                                                                                                                                                                                                                     4612
                                                                                                                                                                                                                                                                         4662
                                                                                                                                                                                                                                                                                                                                   4602
                                                                                                                                                                                                                                                                                                                                                                                               4542
                                                                                                                                                                                                                                                                                                                                                                                                                            4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                         4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3942
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4002
```

밁 δ 밁 δ 멼 Ś В Ś 망 Ś 밁 ঠ B Ş 밁 Ś 밁 δ 밁 Ś В Ş 밁 Ś 밁 S 밁 S 밁 δ

TGGCTGG

```
US-10-357-930-20969
US-10-357-930-20969
Sequence 20969, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: LOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: LOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR FILING DATE: 2003-02-04
PRIOR PPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 00/189,862
PRIOR PILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/210,454
PRIOR FILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR AP
                                          Ś
                                                                                      밁
                                                                                                                                   δ
                                                                                                                                                                                       밁
                                                                                                                                                                                                                            δ.
                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-20969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 4683; Conserv
    584
                                               533
                                                                                              524
                                                                                                                                          473
                                                                                                                                                                                         464
                                                                                                                                                                                                                                      413
                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                 353
                                                                                                                                                                                                                                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                                                                                                                293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
                                                                                      ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                        AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGAGTGGAGCCTTTGAGC
                                                                                                                                                                                                                                                                           GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                         GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAAIGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                       ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                    AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                            ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCTGGCTGCCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 4413; DB Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>;</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
643
                                                                                         583
                                                                                                                                     532
                                                                                                                                                                                    523
                                                                                                                                                                                                                                 472
                                                                                                                                                                                                                                                                                463
                                                                                                                                                                                                                                                                                                                               412
                                                                                                                                                                                                                                                                                                                                                                            403
                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    얶
```

3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGGAGGCT 3772	653		0C	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	<i>3</i> -2	3293 CTTCTCAGCTTTATGAAGAAGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352 	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGGATAATTTTTTTT	ωω	ப ப	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGG 3112 	ω ω	2933 TAGCGCTGAGACTGAGCCAGCTTTGGGGGTTCAGGTAGGT	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCCT 2932 	2803 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2862 2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872
RESULT 3 US-10-357-930-21071 ; Sequence 21071, Application US/10357930	Oy 4793 GCGAAGGGGTGGCTTCGGACGCTCTGGAGCTTGCATGTCTTTAGGTGGGGTGG 4852	4733 AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG	4663 TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT 4673 TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTAATGAGCAACTCCTAC [QY 4553 GTTCACCACTTCCAGAGTGTGGGCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC 4612	4493 ATTCTO 4543 ATTCTO	Qy 4433 AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492	Qy 4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432 	OY 4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4372	QY 4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312	QY 4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG 4252	QY 4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTGTAAGTGTCGCTAGTTGCTG 4192	QY 4073 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132	QY 4013 AGGTCACTGGAACAAGTGATAGTGCAGATTCGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072	QY 3953 CGTCCTCAGTCCTACAACCTACAATCGATCGTATGGAATCGCTCCTGGCAGCTGAACATAGG 4012	Qy 3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAAGGGG 3952

В

중 유

8 8 8

음 성 음

중 유

8 8 8 8

음 성

유 성 유

8 B 8

음 성 음

8 8

중 음 중

653 ONTICOCACATITICADACICATIVADACICACICACACITINATORICOSACCITINATORICOSACCITINATORICOSACCITINATORICOSACCITINATORICOSACCITINATORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICADORICOSACCITICACITICADORICOSACCIT	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAAGAAGAAGACTTATTG 532	353 GAGAAAGAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC	Qy 233 GGCTGGCTGCAAAGCATCTTTTGTTGTTGAATGGTTATTCCAGTCATCTTTTATGA 292	3 B C	; LENGIH: 5145 ; TYPE: DNA ; ORGANISM: Homo sapiens ; PEATURE: ; NAME/KEY: misc_feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-21071	PRIOR PRIOR PRIOR PRIOR NUMBER SOFTWA SEQ ID	PRIOR FILING DATE: 2000-05-09 PRIOR APPLICATION NUMBER: 60/207,454 PRIOR FILING DATE: 2000-05-25 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR FILING DATE: 2000-06-09 PRIOR APPLICATION NUMBER: 60/210,007	REPERENCE: MRI-007BCN WIT APPLICATION NUMBER: US/10 NIT FILING DATE: 2003-02-04 APPLICATION NUMBER: 09/785 FILING DATE: 2003-02-16 APPLICATION NUMBER: 60/183 REPLICATION NUMBER: 60/183	; Publication No. US20040259086A1 ; GENERAL INFORMATION: ; APPLICANT: Schlegel. Robert ; APPLICANT: Endege, Wilson ; APPLICANT: Monahan, John ; APPLICANT: Monahan, John ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ; TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF ; TITLE OF INVENTION: HUMAN PROSTATE CANCER
CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAACCGAAGGTTGGACCCAAGTTTGGAACCCAAGTTTGAACCCAAGGTTGGAACCCAAGTTTGAACCCAAGGTTGGAACCCAAGTTTGAACCCAAAGTTGGAAACCCAAGTTGGAAACCCAAGTTGGAAACCCAAAGTTGGAAACCCAAAGTTGAACCCAAAGTTGGAAACCCAAAGTTGAACCCAAAGTTGAAAACCCAAAAGTTGAAAACCCAAAAGTTGAACCCAAAAGTTGCATCCAACATTCAAAGCTCCCAACATTGCACTTCTAACTTCAACCTTCCAACATTGCACTTCTAACTTCAACCTTCTAACTTCTAACTTCTAACTTCAACCTTCTAACTTTAACTTCTAACTTCTAACTTTAACTTCTAACCTTAACTTCTAACCTTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAACTTTAACTTCTAAAAAA	1553 1604 1613 1664 1673 1724	1433 1484 1493 1544					893 944 953		

, 8	B 8	당 &	B 8	g Q	B 8	g &	g &	B 8	g Q	₿ ઇ	B 8	B 8	D Q	B 8	B 8	р Q	D Q	D _b
2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAAGAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTITIGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572 	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGAG	2273 ACTOTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TIGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTTGAGGGCCTTAAGGGCT 2152	2033 TTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGC)
	-		-												·			
Qy Db	D Qy	Qy db	P Q	da Vo	עס מם	Db Qy	р	ДУ	Db Qy	Db Q	Db Qy	D QQ	Db dg	Db Qy	D 45	S B &	D Qy	Db
3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG	833 883	3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAAGCTGAGAAGA	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT		543	583	473 523	3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3293 CTTCTCAGCTTTATGAAGAAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT	3053 TGACAGCCGAGGACACCAGCATCACTCTGCTGGACCGACC			2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT	2863 TIGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC

FOR THERAPY

읶

```
RESULT 4
US-10-357-930-21083
J Sequence 21083, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
                                                                                                                                                S
                                                                                                                                                                                   밁
                                                                                                                                                                                                      중 유
                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                                                                                                 몽
                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                     음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 성 음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                4903
                                                                                                                                                         4853
                                                                                                                                                                                     4843
                                                                                                                                                                                                                4793
                                                                                                                                                                                                                                                                                                                              4673
                                                                                                                                                                                                                                                                                                                                                           4663
                                                                                                                                                                                                                                                                                                                                                                                     4613
                                                                                                                                                                                                                                                                                                                                                                                                                 4603
                                                                                                                                                                                                                                                                                                                                                                                                                                             4553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4003
                                                                                                                                                                                                                                                                                                                                                                                                                GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                           AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                  TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                           TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                     TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                          TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGTGCTGGTCAACGATTTGAGTTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG
                                                                                                                                recree
                                                                                                                                               TGGCTGG 4859
                                                                                                                                                                                        GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTGGATGTCTTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GTGGGGCTGGGCGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT
                                                                                                                                4909
                                                                                                                                                                                                                                                                        4792
                                                                                                                                                                                                                                                                                                    4782
                                                                                                                                                                                                                                                                                                                              4732
                                                                                                                                                                                                                                                                                                                                                                                     4672
                                                                                                                                                                                                                                                                                                                                                                                                                                          4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4312
                                                                                                                                                                                                                4852
                                                                                                                                                                                                                                            4842
                                                                                                                                                                                                                                                                                                                                                           4722
                                                                                                                                                                                                                                                                                                                                                                                                                 4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4062
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4012
                                                                                                                                                                                        4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: MONAHAN, JOHN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT PILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILLING DATE: 2000-02-17
PRIOR FILLING DATE: 2000-03-16
PRIOR FILLING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/201,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILLING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILLING DATE: 2000-118
PRIOR FILLING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 21083
LENGTH: 5145
                                     8
                                                                                         S
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                    밁
                                                                                                                            멂
                                                                                                                                                  δ
                                                                                                                                                                                     맑
                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                   당
                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n =
US-10-357-930-21083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 4683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: DNA
ORGANISM: Homo :
FEATURE:
                                             653
                                                                                                                               584
                                                                                                                                                                                                                                                                                                                                                          344
                                                                                                                                                         533
                                                                                                                                                                                     524
                                                                                                                                                                                                                473
                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                      413
                                                                                                                                                                                                                                                                                                    404
                                                                                                                                                                                                                                                                                                                            353
                                                                                                                                                                                                                                                                                                                                                                                     293
                                                                                                                                                                                                                                                                                                                                                                                                                                          233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   173
                                                                                                                                                                                                                                                                                                                                                          CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATGTAATG
                                CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                      TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                           AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                  GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                    CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                             TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                      ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                     ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 4413; DE Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ω
--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Indels
```

5145; 1;

Gaps

232

403

352 343 292 283

712 703 652

763

592 583 532 523 472 463 412

2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932			γŞ
2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	Qy da	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792	용 성
2753 GATGCTAGAATCCCCCCTAGACGGAAGAAACCATTTTATTCAGTGAATTACACATCCTC 2812	Qy dd	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	B 8
93 43	Qy dd	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	유 성
2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	Qy Db	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1612	유 성
73 23	Qy	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC 1552	p 8
2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	Оу	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492	B 8
53 04	Qy	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	QQ 4G
2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	ОУ	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	B 8
2333 GCCGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	ОУ	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	B 8
	Ωy	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT 1252 	β Q
13 64	dd dd	1133 ACTITATCCCCCAGICTCATITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192 	P 64
53 04	ΩУ	1073 TGATACAGCAGAATGGGATTGGTTTATATGTCTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	B 8
	Qγ	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072 	B 8
	dd dd	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	B 8
	Db QY	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	B &
GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	y da v	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	B 63
1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	D GY	773 TIGATIGCAGICAGAAGGITGIAGTITACGAICAAAGCICCCAAGAIGITGCCICICICT 832	å S
	da	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	B &

|--|

중 유

ঠ 몽 중 유 ક 밁

중 유

ঠ

유 성 유

중 유

중 음 중

8 8 8 8

음 성 밁 8 당 S 밁 Ş 밁 ঠ 밁

중 유

```
밁
                                                 5
                                                                                 ద
                                                                                                            Ś
                                                                                                                                        밁
                                                                                                                                                            Ş
                                                                                                                                                                                            밁
                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; NAME/KBY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,
US-10-357-930-21303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
; CURRENT FILLING DATE: 2003-02-04
; PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/783,319
PRIOR FILLING DATE: 2003-02-16
; PRIOR FILLING DATE: 2000-02-17
; PRIOR FILLING DATE: 2000-05-18
; PRIOR FILLING DATE: 2000-05-18
; PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILLING DATE: 2000-05-25
; PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILLING DATE: 2000-05-05
; PRIOR PILLING DATE: 2000-05-09
; PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILLING DATE: 2000-12-13
; PRIOR PILLING DATE: 2000-12-13
; PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILLING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 4683; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 21303
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 62232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                    713
                              764
                                                                                  704
                                                                                                            653
                                                                                                                                        644
                                                                                                                                                                  593
                                                                                                                                                                                            584
                                                                                                                                                                                                                       533
                                                                                                                                                                                                                                                  524
                                                                                                                                                                                                                                                                            473
                                                                                                                                                                                                                                                                                                        464
                                                                                                                                                                                                                                                                                                                                  413
                                                                                                                                                                                                                                                                                                                                                              404
                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                                                                                                                              293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                       AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                          CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                          CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                     TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGC
                                                                                                                                                                                                       ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                           ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGCACTTATTG
                                                                                                                                                                                                                                                                                                  AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                  AGTCACCACCAGCCTGACCCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTTGAGC
                                                                                                                                                                                                                                                                                                                                                        GAGAAAGAĞACATTCACTTGGAĞĞĞCTCTTĞCTĞAAAATĞĞĞTTTAACTCTCCTTTTĞCC
                                                                                                                                                                                                                                                                                                                                                                      GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC 412
                                                                                                                                                                                                                                                                                                                                                                                                           ATCAAATGTGAGGGGTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                              ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CGCTGGCTGCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81.0%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 4413; DB
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               υ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                       823
                                                 772
                                                                           763
                                                                                                                                 703
                                                                                                                                                            652
                                                                                                                                                                                       643
                                                                                                                                                                                                                  592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               292
                                                                                                                                                                                                                                            583
                                                                                                                                                                                                                                                                      532
                                                                                                                                                                                                                                                                                                  523
                                                                                                                                                                                                                                                                                                                              472
                                                                                                                                                                                                                                                                                                                                                                                                                                        352
                                                                                                                                                                                                                                                                                                                                                         463
                                                                                                                                                                                                                                                                                                                                                                                                              403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ۲
                                 밁
       δ
                                                        S
                                                                                    ₽
                                                                                                              Ş
                                                                                                                                           뮍
                                                                                                                                                                 Ś
                                                                                                                                                                                               В
                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
       1853
                                                                                                                                           1724
                                                                                                                                                                       1673
                                                                                                                                                                                                  1664
                                                                                                                                                                                                                                                      1604
                                                                                                                                                                                                                                                                                  1553
                                                                                                                                                                                                                                                                                                                                                                                              1433
                                                                                                                                                                                                                           1613
                                                                                                                                                                                                                                                                                                            1544
                                                                                                                                                                                                                                                                                                                                        1493
                                                                                                                                                                                                                                                                                                                                                                  1484
                                                                                                                                                                                                                                                                                                                                                                                                                         1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1013
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         953
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         773
CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912
                                                                                               GCTTCTCCTCATCAGAAGATGCTTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA
                                                                                 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT
                                                                                                                                                                                                           GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                                                                                                        CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT
                                                                                                                                                                                            GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG
                                                                                                                                                                                                                                                 caccererecedacrerecracereagaeecaecaecaeacaaacececerecarecececa
                                                                                                                                                                                                                                                                  CACCCTGTGCCGACTCTGCTACCTCAGAGGCCAGGACAAAGGCCCGTGCATCCCGCCA 1612
                                                                                                                                                                                                                                                                                                    CAAATGAACCTGTCCCTGCTGTCTCAGAGGGGTGGACAGAAAAGCGAGAGACGCCCTCAGTC
                                                                                                                                                                                                                                                                                                                                                            AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC
                                                                                                                                                                                                                                                                                                                                                                            AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                  CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTA
                                                                                                                                                                                                                                                                                                                                                                                                                                  CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCATGAAGAGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAGAAAAAAGAC 1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATGCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGATACAGCAGAATGGGATTGGTTATATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAACCCGAATTTTTCCTATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTTACCTGTTGCCAACATTGGGC 1012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCAGACTGTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                     1852
                                                                                  1843
                                                                                                                                     1783
                                                                                                                                                                                            1723
                                                                                                                                                                                                                       1672
                                                                                                                                                                                                                                                  1663
                                                                                                                                                                                                                                                                                                        1603
                                                                                                                                                                                                                                                                                                                                  1552
                                                                                                                                                                                                                                                                                                                                                              1543
                                                                                                                                                                                                                                                                                                                                                                                         1492
                                                                                                                                                                                                                                                                                                                                                                                                                   1483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    832
```

8	유 성	B 8	용 성	g &	g Q	유 성	유 왕	<u> </u>	g &	g &	B 8	g Q	유 성	ъ Q	B 8	g &	B 8	р
2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTTAGGTAGACCCTGTTAGGGACAGAGCC 2992	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TIGITCITAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAAGAAAGACACTTGTGACCTCCTATAGACAATTTTTTT 2572	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGA	2333 GGCGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCCTGGGCCTGAGGCCTTAAGGGCT 2152	2033 TITTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	
														· ···				
문 .	S B 8	? B 5	\$ B \$	5 B 6) B (}	ду У	₽ \$	}	}	\$ B &) B &	5 B 8	}	S B 7	δ B 1	g B	S B
	CUSTOCIONES CON CARCOLINAME CON CARTON CONTROL INSTANCE IN CONTROL INSTANCE IN CONTROL INCOLUTION IN CONTROL IN CONTROL IN CONTROL IN CONTROL INCOLUTION INCOLUTION IN CONTROL INCOLUTION IN CONTROL INCOLUTION INCOLUTION INCOLUTION I	CGTCGTCAGTCGAACCTAAATTAACTTGTAATCGAAATTCGAAGTGGAAGAGAGAAAAAAAA	CONTIGNATION CANTO CONTIGNATION CONTICNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTICNATION CONTIGNATION CONTIGNATION CONTIGNATION CONTICNATION	3/3 GASAGNAGET I I AS I GAGAAGGAA I A I CAGARI AAAAAGGI I GAGAAAAAG I GAGAAAAG I GAGAAAAG I GAGAAAGA 3882 3823 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 3882 3833 CCATTGAAGTTAGTGAGGTTGAGATAATAAAACGGTTGAGAAAGCTTGAGAAGA 3882	CATOCOGATOSSOCIONA STATE I TO CATOCA CANACTITICA CATACTACA ACATOCACA CATACTACA CATACTA	GGTACAAATIGCTGAGGAGAAGCAGGAAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG	ARTATGGCAGAATTTTATAGGAAACTTCCTAGGAAGGTAAATTATGGGAAGATTAAGAAA	CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAAATGTAAT	ANGECEANNI SIGNAILIANI I 1993 I SUSIAGENANCHOCHCOCHCCI I CHAMAIC I CHACA ANGECEANNI SIGNAILIAN ANGERTANNI ANGERTANNI ANGERTANNI ANGECEANNI SIGNAIN ANGECEANNI ANGECEA	ANTICADADATICAL INFORMATICAL INFORMATION OF THE ANTICADADATICAL INFORMATION OF THE ANTICADATICAL INFORMATION OF THE ANTICADATICATICAL INFORMATION OF THE ANTICADATICATICAL INFORMATION OF THE ANTICADATICATICATICATICATICATICATICATICATICATIC		TOTAL SAFETY CONTINUES AND ASSESSMENT OF THE SAFETY CONTINUES OF THE SAFETY CO	3293 CTTTTTCAGCTTATGAGGGGAAGCGGAAGTTCTAGGATTCAGCTGAACTGAGGAACT 3352	TO ALCHOUR AND COLDINATE AND CARLES AND COLDINATE COLDINATE COLDINATE COLDINATE COLDINATE COLDINATE COLDINATE COLDINATE COLDINAT	173 ATTENDED TO A CONTRACTOR OF A THEORY AND A CONTRACTOR OF A		043	2983 TAGCGCTGAGACTGAGCCCAGCTTGGGGGTCAGGTAGGTA

```
RESULT 6
US-10-357-930-21307

(Sequence 21307, Application US/10357930)

(Publication No. US20040259086A1)

(GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT FILING DATE: 2003-02-04

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276
                                                                                                                                                                                                                                                           4903
                                                                                                                                                                                                                                                                                                                   4843
                                                                                                                                                                                                                                                                                                                                              4793
                                                                                                                                                                                                                                                                                                                                                                            4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4073
                                                                                                                                                                                                                                                        TGGCTGG 4859
                                                                                                                                                                                                                                                                                                                               GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG 4852
                                                                                                                                                                                                                                                                                                                                                                    AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG 4792
                                                                                                                                                                                                                                                                                                               GCGAAGGGTGGCTTCGGAGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                            TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGGGCTTCTCTGGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAAGTGCTGGTCAACGATTTGAGTTAGGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                     FOR
THERAPY
                                                                                                                                                                                                                                                                                                              4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4672
                                                                                                                                                                                                                                                                                                                                                                                                                               4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                           4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4252
                                                                       ဝှု
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4182
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; PEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-21307
                                     5
                                                            문
                                                                                         Ş
                                                                                                                          멼
                                                                                                                                                 Ś
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR PILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-19-13
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local
            824
                                        773
                                                                                                713
                                                                    764
                                                                                                                             704
                                                                                                                                                         653
                                                                                                                                                                                      644
                                                                                                                                                                                                                    593
                                                                                                                                                                                                                                                 584
                                                                                                                                                                                                                                                                                                           524
                                                                                                                                                                                                                                                                            533
                                                                                                                                                                                                                                                                                                                                                                    464
                                                                                                                                                                                                                                                                                                                                                                                                413
                                                                                                                                                                                                                                                                                                                                                                                                                            404
                                                                                                                                                                                                                                                                                                                                                                                                                                                         353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4683;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                           AACAGGACAAAGTGTTAAGTTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                      ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
         AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                          CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                              CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                   TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                           TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                            TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                  AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ĊĠĊŦĠĠĊŦĠĊŦĊĊAĀĀĠĊĀŦĊŦŤŦŦĠŦŦĠŦĠĠĀĀŦĠĠŦŦĀŦŦĊĊĀĠŦĊĀŦĊŦĊŦŦŦŖŦĠĀ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGCTGGCTGCCAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              pred. No. 0;
ned. No. 0;
ned. No. 0;
ned. No. 0;
ned. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                u
V
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ⊢•
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                              772
                                                                 823
                                                                                                                            763
                                                                                                                                                      712
                                                                                                                                                                                     703
                                                                                                                                                                                                                  652
                                                                                                                                                                                                                                                                          592
                                                                                                                                                                                                                                              643
                                                                                                                                                                                                                                                                                                                                                               523
                                                                                                                                                                                                                                                                                                        583
                                                                                                                                                                                                                                                                                                                                    532
                                                                                                                                                                                                                                                                                                                                                                                                                                                      412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           292
                                                                                                                                                                                                                                                                                                                                                                                             472
                                                                                                                                                                                                                                                                                                                                                                                                                          463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       283
```

중 음 성

유 성

В 8 밁 Ş 음 성 밁 Ş 밁 Ś 밁 Ś

ð 밁

밁 S 밁 Ś 밁 S 밁 S

GYTTETTEATGCACTGTTTAGCTTGGATTCTCCCGCTCCACCATCGCTACCA 13:3	1372	1372 Qy 1423 Qy 1432 Db 1483 Qy 1492 Db 1543 Qy 1612 Db 1663 Qy 1672 Db 1772 Db 1773 Qy 17792 Db 1783 Qy 1792 Db
1363 1372 1423 1432 1483 1492 1552 1603 1572 1663 1672 1672 1783 1773 1792 1193 1193 11963 11963	1372	1372 Qy 1372 Db 1423 Qy 1432 Qy 1432 Db 1543 Qy 1552 Db 1612 Db 1663 Qy 1672 Db 1773 Db 1774 Db 1775 Db
5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 8 5 <td></td> <td></td>		
	2393 TTGAAAAGCAGTITAA 2444 TTGAAAAGCAGTITAA 2453 AGAACAGGTCACGGG 2513 TGGAAATCATTGAGGGI 2514 TGGAAATCATTGAGGGI 2515 TGGAAATCATTGAGGGI 2517 TTTTCTTGTTCACAAA 2623 TTTTCTTGTTCACAAA 2623 TATTTTTTGGAAAATGG 2623 TATTTTTTGGAAAATGG 2623 TATTTTTTGGAAAATGG 2623 TATTTTTTGGAAAATGG 2623 TATTTTTTGGAAAATGG 2623 TATTTTTTGAAAATGG 2623 TATTTTTTGAAAATGG 2623 TATTTTTTGAAAATGG 2623 TATTTTTTGAAAATGG 2623 TATTTTTTAACAATCCCCC 263 GATGCTAAGAATCCCCCC 261	TIGAAAGCAGITTAAACGCAGAAGCTGCCAAATGGAAT

3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTTGGAA 3892		3043 TAGTGGTAAATCCAAGAGAAATGATCCTTATCCTAAACCTTGATTCACACACA
RESULT 7 US-10-357-930-22820 US-10-357-930-22820 Sequence 22820, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Monahan, John APPLICANT: MONAHAN, John TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: UNMAN PROSTATE CANCER FILE REFERENCE: MRI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR FILING DATE: 2003-02-16 PRIOR FILING DATE: 2003-02-16 PRIOR FILING DATE: 2000-02-17 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR APPLICATION NUMBER: 60/189,862	9y 4133 GTGGGGGTGGGCGGGTGTTTTGTCATTTTTCCCTTCCTGTAAGTGTCGCTAGTTTCTGT 4192 bb 4183 GTGGGGCTGGGCGGGTGTTTTCTCTGTAAATCGACAGTTTTTTTGACCAGGATGTTCTGTGT 4242 9y 4133 GCTCGTATCTCAGGTTTTTCTCTGTTTTTGACAGAATTGTCTGTGTAGTTGTGTGTG	

Ş

8 8 8 8 8

DЪ

8 B 8

음 성 음

Ş

음 성 음

8 8 8

음 성

음 성

음성 음성 음성

유성

유 성 유

Qy 833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	Qy 773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	Qy 653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	Qy 593 TGGAAAGTGGAACAGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	Qy 533 TTGTCATGGCCCATGAGATGATTGGAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG 532	Qy 413 AGTCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	Qy 353 GAGAAAGACATTCACTTGGAGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412	Qy 293 ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352	Qy 233 CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	TTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 23	Query Match Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative _0; Mismatches 3; Indels 1; Gaps 1;	; NAME/KEY: misc feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-22820	; LENGTH: 5145 ; TYPE: DNA ; ORGANISM: Homo sapiens ; PRATURE.	PILING DATE: 2000-12-13 OP SEQ ID NOS: 62232 ARE: PastSEQ for Windows Ver NO 22820	PRIOR FILING DATE: 2000-06-09 PRIOR APPLICATION NUMBER: 60/219,007 PRIOR FILING DATE: 2000-07-18 PRIOR APPLICATION NUMBER: 60/255,281	; PRIOR FILING DATE: 2000-03-16 ; PRIOR APPLICATION NUMBER: 60/207,454 ; PRIOR FILING DATE: 2000-05-25 ; PRIOR APPLICATION NUMBER: 60/211,314
Db 1964 GTCCTGATAAGGAGGAAGCCAGTCCCCAAGAAGCTGCAGACCGCCCAGAGGTCCC 2032	1904	1/93 GCTICTCCICATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA	1/33 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1673 CGCTCAGTIGGGCTIGTCCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGGGTT	1613 GCGTGCCCAGCGTGCCCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG	Db 1604 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1663	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAGGGAGGCCCCTCAGTC	1433 AGAACCAGACTGGACCATCAGGCCAAAGAGCAACTCAAGCTGCTGCACCTGGAGAAAGC	CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTA		1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA	Qy 1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	Qy 1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	QY 1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	Qy 1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCAGATGTCCTCAACAAGGAGC 1072	OY 953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	Qy 893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952

, 8	QQ VQ	da Vy	B 8	Db Qy	D Qy	Db Qy	g 9	D Q	ο O	D Qy	Db Qy	Qy dd	g Q	Qy bb	Db Qy	Qγ	p &	Db
3053 TGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGACCCATTAGGGGCCTTGCCCAAGG 3112	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2873 GITGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TIGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	2573 TTTTCTTGTTCACAAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGAACACTTGTGACTTCTATAGACAATTTTTT 2572	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCAGCAGCACCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT 2152	2033 TITTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	44
	D Q	אס אס	م م م	- do	dd do	ОУ	Qγ		Db QY	Db QY	o do QY	dd dd	dd dy	da Qy	Db QY	- DB - Q2	D A	
4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCCCTTCCCTGTAAGTGTCGCTAGTTGCTG 4192	123	063	953	893 943	3 83 3 883	3773 3823	3713 3763	3653 3703	3593 3643	35 53 583	3473 3523	3413 3463	3353 3403	3293 3343	3 2 3 3 3 2 8 3	3173 3223	3163 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT	3103 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC

```
# Sequence 26669, Application US/10357930

# Publication No. US20040259086A1

# GENERAL INFORMATION: Genert

# APPLICANT: Schlegel: Robert

# APPLICANT: Schlegel: Robert

# APPLICANT: MORADAN, John

# TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR

# TITLE OF INVENTION: HOWAN PROSTATE CANCER

# TITLE OF INVENTION: HUMAN PROSTATE CANCER

# FILE REPERENCE: MRI-007BCN

# CURRENT APPLICATION NUMBER: US/10/357,930

## CURRENT APPLICATION NUMBER: 09/785,276

## PRIOR APPLICATION NUMBER: 60/183,319

## PRIOR APPLICATION NUMBER: 60/183,319

## PRIOR FILING DATE: 2000-02-17

## PRIOR APPLICATION NUMBER: 60/189,862

## PRIOR APPLICATION NUMBER: 60/189,862

## PRIOR APPLICATION NUMBER: 60/207,454

## PRIOR APPLICATION NUMBER: 60/207,454

## PRIOR APPLICATION NUMBER: 60/211,314
                                                                                                                                                                                                                                                                                                  RESULT 8
US-10-357-930-26669
                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                              음 중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           음 중 음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                          4903
                                                                                                                                                                                                                                                                                                                                                                                                                4843
                                                                                                                                                                                                                                                                                                                                                                                                                                          4793
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4243
                                                                                                                                                                                                                                                                                                                                                                         TGGCTGG
                                                                                                                                                                                                                                                                                                                                                                                                                GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCCTTTAGTGCTGGTTCAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGGGCTTCTCTTGGCCATGGTCCCCCTTCCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTTGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA
                                                                                                                                                                                                                                                                                                                                                          4909
                                                                                                                                                                                                                                                                                                                                                                                    4859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4672
                                                                                                                                                                                                                                                                                                                                                                                                                                          4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4362
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; PRIOR FILING DATE: 2000-06-09; PRIOR APPLICATION NUMBER: 60/219,007; PRIOR FILING DATE: 2000-07-18; PRIOR APPLICATION NUMBER: 60/255,281; PRIOR APPLICATION NUMBER: 60/255,281; PRIOR FILING DATE: 2000-12-13; NUMBER OF SEQ ID NOS: 6232; SOFTWARE: FastSEQ for Windows Version 4.; SEQ ID NO 26669; SEQ ID NO 26669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n =
US-10-357-930-26669
                                        δ
                                                                        밁
                                                                                         5
                                                                                                                     밁
                                                                                                                                                  δ
                                                                                                                                                                                   밁
                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4683;
                                              893
                                                                         884
                                                                                                                               824
                                                                                                                                                                                                                                                                      653
                                                                                                                                                                                                                                                                                                   644
                                                                                                                                                                                                                                                                                                                                                         584
                                                                                                     833
                                                                                                                                                         773
                                                                                                                                                                                     764
                                                                                                                                                                                                               713
                                                                                                                                                                                                                                            704
                                                                                                                                                                                                                                                                                                                             593
                                                                                                                                                                                                                                                                                                                                                                                   533
                                                                                                                                                                                                                                                                                                                                                                                                                524
                                                                                                                                                                                                                                                                                                                                                                                                                                          473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           173
                                                                                                                                                                                                                                         CGCTGGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952
                                                                                       CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTTCAACTCTGTTC
                                                                                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                     AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                                                                                                                                                                                                                                         TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                    ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTTGGCCTCTGTGAAGGAA
                                                                           CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                                                                                                                                                                                                                                                                                   TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                    TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A,T,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 4413;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ű.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                    1003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     292
                                                                         943
                                                                                                     892
                                                                                                                                 883
                                                                                                                                                         832
                                                                                                                                                                                      823
                                                                                                                                                                                                                                            763
                                                                                                                                                                                                                                                                                                   703
                                                                                                                                                                                                                                                                                                                             652
                                                                                                                                                                                                                                                                                                                                                          643
                                                                                                                                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               352
                                                                                                                                                                                                                                                                                                                                                                                                                 583
                                                                                                                                                                                                                                                                                                                                                                                                                                            532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 283
```

Ş	B &	B 8	B 8	Db Qy	Db dg	g 8	B 8	B 8	당 왕	B 8	₽ &	B 8	D Q	gg Qy	B &	g Q	Db Qy	d dy
	1973 GCCAGAGCAATGCATTCGGTCAGAACCAGCAGCAGGGGCACAGGCCCCAGAGGTCCC 2032	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	1553 CACCOTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1612	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC 1552	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGG 1492	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCAACA 1312	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	1133 ACTITATCCCCGAGICTCATITCCIGCGIGIGCCIGTGAATGACAGCTITTGIGAGAAAA 1192	1073 TGATACAGCAGAATGGGATTGGTTTATGTGTTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGGAGGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012
Ş	B 8	B 8	B 8	B 8	망양	문 왕	₽ <i>Q</i>	B 8	B 8	B 8	B 8	B &	D Q	B 8	B 8	B 8	B 8	дb
3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGGCTTTGACCACTACCAT 3172	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGG 3112	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGCTCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTITTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	93 44	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTACCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGGCCTGGGCCTTAAGGGCT 2152	2084 TTTATCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2143

ହ ଞ ହ

3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892	TCTACCTTAGACCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT
RESULT 9 US-10-357-930-26815 Sequence 26815, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER PILE REFERENCE: MRI-007BCN CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319 PRIOR RILING DATE: 2000-03-16 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR APPLICATION NUMBER: 60/207,454 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR APPLICATION NUMBER: 60/211,007 PRIOR APPLICATION NUMBER: 60/219,007 PRIOR APPLICATION NUMBER: 60/219,007 PRIOR APPLICATION NUMBER: 60/219,007	Qy 4253 ACTICATIONTICCTATGGTOACCTCTANAACCAGCAGAATGATATGACTCAACCAGAA Db 4303 ACTICATIONTICCTATGGTOACCTCTANAACCAGCAGAATGATTATGACTCAACCAGAA Dd 4313 CCGACTTGGTTATGGGGATTGATGAGGCCGCACGACCTCACTAGTTGTGCACAAATAATGT Qy 4313 CCGACTTGGTTATGGGGATTGATGAGCCGCACGACCTCACTAGTTGTGCACAAATAATCT 432 Qy 4313 GCTATGATGGGGTTAAAGGCAGAAGAGGGTCAGCCGCATTGTATCATCATCGG 4423 Qy 4313 ACGTATGATGGGGTTAAAGTAAAGAGAGGATCAGCCGCATTGTAATCATCTGGG 4426 Qy 4433 ACGTATGATGGGGTTAAAGTAATGATTTTTAAATATCACACCAATTGAATCTTTAATCAGAC Qy 4433 ACGTATGACCACACTTCAACAATTAATTTTTAAATATACAACACACACACACACACACACACACACACACACACACA

8 8 8 8 8 8 8

음 송 음

১ ৯ ১

음 성 음

ફ

음 성 음

8 8 8

8 8 8 8

B 8 B 8 B 8 B 8 B

QY 953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	Qy 893 ACCTGCTTGCAGGTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	Qy 833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	Qy 773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCT 832	Qy 713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	QY 653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	Qy 593 TGGAAAGTGGAACAGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	Qy 533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGGAGGGGGGGG	Qy 413 AGTCACCAGCCTGACCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	Qy 353 GAGAAAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412	Qy 293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352	Qy 233 CGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	G 23	Query Match 81.0%; Score 4413; DB 18; Length 5145; Best Local Similarity 99.9%; Pred. No. 0; Matches 4683; Conservative 0; Mismatches 3; Indels 1; Gaps 1;	; NAME/KEY: misc_feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-26815	: LENGTH: 5145 ; TYPE: DNA ; ORGANISM: Homo sapiens ; FEATURE:	; PRIOR FILING DATE: 2000-12-13 ; NUMBER OF SEQ ID NOS: 62232 ; SOFTWARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 26815
2033 IIIIA CICCACINCHARICHARGUSTIGHARGACAATTACCACACCACCACCTCCTTT 2092	1973 GCCAGAGCAACGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC			QY 1793 GCTTCTCCTCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852	OY 1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792	QY 1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	QY 1613 GCGTGCCCAGCGTGCCAGCGTGCAGCCTGTTAGAGGACAGCCCGCTGGTACAGG 1672		QY 1493 CAPATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGGCCCCTCAGTC 1552	QY 1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCAGCTGCACCTGGAGAAGC 1492	QY 1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432	Qy 1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	Qy 1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACA 1312	Qy 1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	Qy 1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	Qy 1073 TGATACAGCAGAATGGGATTAGTTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	Qy 1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072

4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312 	Db 0y	ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	र्ठ
4193 CCICGIAIC ICAGGIIIIICICIGIIIIIIIGAGAAAIGGACAGIIIIIIIGACCAGGAIGIG 	80 8	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	음 원
4133 GONGGENEGGGGGTGTGCGATTGTTCTTTCCCTTGTAAGTGTCGCTAGTTGCTG 4183 GTGGGGCTGGGCGGGTGTTCATTGTTCTTTCCCTTGTAAGTGTCGCTAGTTGCTG	? B &	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	음 왕
A113 GENERAL CONTROLL CONTROLL CONTROLL CONTROLL CONTROLL CONTROLL CONTROLL CONTROL CO	S B X	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	음 <i>성</i>
4013 TATTOAGCTAGAATGTGGGTTCTTTTTGAAGCCTTTAATGAACATCCTCCTGGCTTTTTTGGGG 4132	S B 8	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	B 8
	} B \$	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	유 성
) B &	2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	유 성
	2 B 4	2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	유 성
) D &	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	음 성
763	G 8	2633 TATTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	B 8
703) B (2	2573 TTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	유 상
643	;	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	유 성
583	d d	2453 AGAACAGGTCACGGGAAAGAGCTGGGGAAAGTGGGCAGTCTAGCTTTTCGGGCAGCA 2512	B &
523	}	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGA	음 <i>청</i>
	D 4	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTGGCGGCGGAGCTGGCATGAAGAGAGAG	유 상
	S B 1	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	유 왕
3343 TGGCAACATCACGATTTAAGGCTAAGGGTAAGGCTAACGACGTCTCTTTGTA	S B 7	2213 TIGCCACAGAGICCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	유 성
	D B '	2153 GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	<u> </u>
3223 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	Q D		5

```
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,862
PRIOR FILLING DATE: 2000-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILLING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILLING DATE: 2000-05-25
PRIOR PILLING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILLING DATE: 2000-07-18
PRIOR PILLING DATE: 2000-07-18
PRIOR PILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                         RESULT 10
US-10-357-930-26912
US-10-357-930-26912
Sequence 26912, Application US/10357930
Publication No. US20040259086A1
GENERAL IMPORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4853
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TEGCTEG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4542
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; LENGTH: 5145
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-26912
                                        S
                                                                      밁
                                                                                           δ
                                                                                                                              밁
                                                                                                                                                  Ś
                                                                                                                                                                              B
                                                                                                                                                                                                            S
                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Simi
Matches 4683;
                                                                        1004
                                                                                                   953
                                                                                                                                944
                                                                                                                                                           893
                                                                                                                                                                                      884
                                                                                                                                                                                                                  833
                                                                                                                                                                                                                                               824
                                                                                                                                                                                                                                                                          773
                                                                                                                                                                                                                                                                                                        764
                                                                                                                                                                                                                                                                                                                                                               704
                                                                                                                                                                                                                                                                                                                                                                                          653
                                                                                                                                                                                                                                                                                                                                                                                                                     644
                                                                                                                                                                                                                                                                                                                                                                                                                                                  593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233
            AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTTGCCAACATTGGGC
                                                                                                                           ACCIGCTIGCAGGIGGGTITGCTGAGIICICICGTIGIITTCCCTGGCCTCTGTGAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                                                                                                                                                   AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC
                                                                                                                                                                                                                                                           CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                            CATCCCACATTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 4413; DE; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5145;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ۲.
                                          1072
                                                                                                                                                        952
               1123
                                                                     1063
                                                                                                1012
                                                                                                                             1003
                                                                                                                                                                                    943
                                                                                                                                                                                                                 892
                                                                                                                                                                                                                                              883
                                                                                                                                                                                                                                                                         832
                                                                                                                                                                                                                                                                                                    823
                                                                                                                                                                                                                                                                                                                                772
                                                                                                                                                                                                                                                                                                                                                                                                                  703
                                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                          763
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      592
                                                                                                                                                                                                                                                                                                                                                                                       712
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        283
```

3233 CCAATTCAAACTGTCTATGCACAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	§
3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCT	\$ 6 1
3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	2033 TITTATCTCCACTGCAAGTGGGAAGTGGGAGGACAATTACCACACCAGCTTCCTTT 2092	B &
103	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032	B 8
043	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	<u> </u>
2933 TAGGGCTGAGACTGAGCCAGGTTGGGGGGTCAGGTAGGTA	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912	8 8
2013 GIIGIGE INCINAMINATE ICAMATATIAGICI ITURICUS MECCITICUS MARIANIMENTE ICAMATATIAGICI ITURICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECACITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECCITICUS MECACITICUS MECITICUS MECITIC	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852	용 성
2813 TIGITICTIAAAAAGCAAGIGICTITIGGIGITIGGAGGACAAAATCCCCTACCATITICAC [1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	용 성
2753 GATGCTAGAATCCCCCCTAGACGGAGGAAAACGATTTTATTCAGTGAATTACACATCCTC 2803 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732	8 8
2743 CICTIAACAICIGCAITIGAGAGAICAGCTAATACTICICCAACAAAATGGAAGGGCA	1613 GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	용 성
2633 TATITITIGAMAATIGAGCIATIGIIGIAMAAAAAAGCAACAGGIGAATAAACCCAGIIGIIACIACCAGIIGATAAACAGGIGAATAAAAGCAACAGGIGATAAAAGCAACAGGIGATCAACCCAGTTGTTACT	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAGAGGCCCGTGCATCCCGCCA 1612	B 8
2623 TETTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	1493 CANATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTC 1552	용 성
2573 TITTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492	음 성
2504 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCCTAGCTTTTCGGGCAGCA	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432	<u> </u>
2454 ACANAGOGRANGOGANAGOGGANAGOGGANGOGANGOGGANGOGANGO	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	8 8
2393 TTCABARGCCAGTTTABARGCCAGGGCTGACTTGCCABATTCGGAGGGGGGGGGGGGGG	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	8 8
2324 ACTCTGCGAGAGAGCGAGAGTGACAGAGCTGGCGAGGCGGGAGCTGGCATGAAGAGAGGCCCCT	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGAT 1252	B 8
22.5 INCOMESSAGE CONTROL OF THE PROPERTY OF THE CONTROL OF THE CON	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	8 8
	1073 TGATACAGCAGAATGGGATTGGTTTATATGTCCTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	B 8

; LENGTH: ; TYPE: DN ; ORGANISM ; FEATURE:		4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4372 	
; PRIOR FII ; NUMBER OF ; SOFTWARE: ; SEQ ID NO		4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312 	
; PRIOR FII ; PRIOR API ; PRIOR FII ; PRIOR API		4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG 4252	
; PRIOR FII ; PRIOR API ; PRIOR FII ; PRIOR API		4133 GTGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG 4192	
; PRIOR PII ; PRIOR PII ; PRIOR API		4073 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTGGGG 4132 	
CURRENT; CURRENT; CURRENT; PRIOR AP		4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072 	
; APPLICAN ; TITLE OF ; TITLE OF		3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012 	
; PUBLICATI ; GENERAL I ; APPLICAN ; APPLICAN	····	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952 	
RESULT 11 US-10-357-9		3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCCAAGCTGTTTTTGGAA 3892 	
		ωι	
Db 48		763	
Qy 47		υ	
		3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTTCCTTAGTGGCTTTTATCCCCTCGG 3712	
Db 47		3593 AATATGGCAGAATTTATAAGGAAACTTCCTAGGGAAGGTAAATTATGGGAAGATTAAGAAA 3652 	
- 4.		8 8	
Db 40	· · <u>-</u> · ·	358	
0у 49		C 353	
Qу 4.		3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	
		3403 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	
ор Оу 4. 4.		343	
Qy 4		33	
		3283 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	

```
4483
                                                                                                                                                                                                                                                                                                                           4493
                                                                                                                                                                                                                                                                          4553
                                                                                                                                                                                                                                                                                                   4543
                                                                                                                                                                                                                                                                                                                                                                          4433
                                                 1843
                                                                                                                                                                                                                                                                                                                                                                                                                           4373
 903
                        853
                                                                         793
                                                                                                 783
                                                                                                                      1733
                                                                                                                                                1723
                                                                                                                                                                        1673
                                                                                                                                                                                                 1663
                                                                                                                                                                                                                          1613
                                                                                                                                                                                                                                                 1603
TGGCTGG
                       TGGCTGG 4859
                                                            GCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                           GCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                          AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                            TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                                                                                                                                                                             AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492
                                                                                                                                                           TAGGGCTTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTAC
                                                                                                                                                                                            TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                          TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT
                                                                                                                                                                                                                                             GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                            GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                              GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG
 4909
                                              4902
                                                                     4852
                                                                                                                     4792
                                                                                                                                                                   4732
                                                                                                                                                                                                                   4672
                                                                                             4842
                                                                                                                                            4782
                                                                                                                                                                                             4722
                                                                                                                                                                                                                                             4662
                                                                                                                                                                                                                                                                      4612
                                                                                                                                                                                                                                                                                                                       4552
                                                                                                                                                                                                                                                                                              4602
                                                                                                                                                                                                                                                                                                                                                                                               4482
```

밁 5

S 밁 Ś 밁 5 밁 Ś 밁

-37-930-26923
-379-30-26923
Lication No. US20040259086A1
REAL INFORMATION:
PLICANT: Endege, Wilson
PLICANT: Endege, Wilson
PLICANT: Endege, WISON
PLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR THE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER REPERENCE: MRI-007BCN
REENT APPLICATION NUMBER: US/10/357,930
REENT FILING DATE: 2003-02-04
COR APPLICATION NUMBER: 60/183,319
COR APPLICATION NUMBER: 60/183,319
COR APPLICATION NUMBER: 60/207,454
COR APPLICATION NUMBER: 60/207,454
COR FILING DATE: 2000-05-05
COR FILING DATE: 2000-06-09
COR APPLICATION NUMBER: 60/211,314
COR FILING DATE: 2000-06-09
COR APPLICATION NUMBER: 60/215,281
COR APPLICATION NUMBER: 60/255,281
COR APPLICATION NUMBER: 60/255,281
COR APPLICATION NUMBER: 60/255
COR PILING DATE: 2000-12-13
BER OF SEQ ID NOS: 62232
TWARE: FASTSSQ for Windows Version 4.0

ID NO 26923
NUMBER: 5145 M: WA

FOR THERAPY OF

밁

Homo

sapiens

밁 성 유 Ś 뮰 Ş 밁 Ś 밁 Ś 밁 Ś 문 Ş 문 δ 밁 Ś 片 S 片 Ś 밁 Ś 밁

8 8 8 8 8	p Q	B &	B &	음 성	B 8	g Q	B 8	QY db	g Q	B 8	8 8	Qy dd	Q	Query Match Best Local S Matches 4683	; NAME ; LOCA ; OTHE US-10-35
953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTACCTGTTCCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952	GTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	8832	AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG 532	413 AGTCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	412	293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352	233 CGCTGGCTGCCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 232	81.0%; Score 4413; DB 18; Length 5145; imilarity 99.9%; Pred. No. 0; Conservative 0; Mismatches 3; Indels 1; Gaps 1;	NAME/KEY: misc_feature LOCATION: 1, 5144, 5145 OTHER INFORMATION: n = A,T,C or G .0-357-930-26923
8 8 8 8 8	Q B Q	8 8 8	B &	B &	B 8	D Q	Db Qy	B 8	B 8	용 &	유 성	Db Q	B 8	р У	Db dd
2084 TTTTATCTCCACTGCATCGAAGTGGGAGGCAGTTGCGAGCAGTTACCACACCAGCTTCCTTT 2083 TCGGCCTTTCCACCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	1973 GCCAGAGCAAGCATTGCATTCGGTCAGAACCAGCAGCAGCAGCACCAGCACCAGCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCACCAGCAG	913	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCA 1912	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTTGGATGGGA 1852	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGCTTGGAGACAGCATAAGCTCAAGCGTT	1613 GCGTGCCCAGCGTGCCAGCGTGCAGCGTGCTTTAGAGGACAGCCCGCTGGTACAGG	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAAGGCCCGTGCATCCCGCCA	1493 CAAATGAAACCTGTCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC	1373 CTACTATARCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA	1313 TCATGAAGAGATGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA	1193 TTTTGCCCTGGTTGGACAAATCAGTAGATTTCATTGAAAAGCAAAAGCCTCCAATGGAT 1252	1133 ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192

, Q	d dy	Qy Db	D QY	dd Qy	95 53	Дb	Qу	ОУ	D Qy	db Qy	dd Qy	Qy db	Qy Db	Db Qy	B 8	B &	B 8	DЬ
3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	3053 TGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAAGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752 	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692 	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGAACACTTGTGACTTCTATAGACAATTTTTT 2572 	2453 AGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 2452 	2333 GGCGGCAGAAGCCAAGTGACAGAGCTGACTGGCGGCGGAGCTGGCATGAAGAGAGCCCCT 2392	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	264 TTG
							 . <u></u>							·				
g Qy	Db Qy	Db Qy	dg dg	Db Qy	g dy	D QY	QУ	Qy dd	ОУ	dg VQ	dd dy	g d	Ωy	Db 45) b 9) p &	B &	D D
4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432	4313 CCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4372	303	193 243	183	123	063	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012 	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952 	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCAAAGCCAATGGCCAAGCTGTTTTTGGAA 3892 	3773 GAGACAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAAGA 3832 	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3712 	3593 AATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652 		AGCCCAAATGTGAATTTATTTGGGTTGGTAGCAGCAGCAGCACCACCACCACTCAAATTCTCAGC			CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC

on 4:0	ICATION NUMBER: 60/207,454 NG DATE: 2000-06-25 NG DATE: 2000-06-09 ICATION NUMBER: 60/211,314 NG DATE: 2000-06-09 ICATION NUMBER: 60/219,007 ICATION NUMBER: 60/219,007 ICATION NUMBER: 60/255,281 ICATION NUMBER: 60/255,281 NG DATE: 2000-12-13	. US/10/357,930 -02-04 99/785,276 -16 -06 -07 -17 -17 -18 -18	SULT 12 -10-357-930-27145 -10-357-930-27145 Sequence 27145, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: MONAHAN, John TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER TITLE OF INVENTION: HUMAN PROSTATE CANCER	4853 TGGCTGG 4859 4903 TGGCTGG 4909	4852 4902	4673 TAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTAC 4732	TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATT 4672	493 ATTCTCAAGTTTCACACHGTATTTCATGTTATGTACACACACACCCAAATGTGTAACA 4552 41	AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGAC
Db 1064 CAACCCGAATTCTTCCCAATCCTTATCTTGGCTGCCAGCAGATGTCCTCAACGAGGGGGGGG	944 ACCTGCTTGCA 953 AATCCACTCTA 1004 AATCCACTCTA 1013 CAACCCGAATT	Qy 773 TTGATTGCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	Qy 593 TGGAAAGTGGAACAGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA	Qy 533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC	Qy 473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAAGACGACTTATTG	Oy 353 GAGAAGAGACATTCACTTGGAGGGCTCTTCGCTGAAAATGGGTTAACTCTCCTTTTGCC		Db 224 GCTTGCAGTCCAGAGCTGTTGGAGCGGGGAGCAAAGGTAAAGAATGATGTAATG Db 224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGGGGAGCAAAGGTAAAGAATGATGTAATG Db 224 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGGGGAGCAAAGGTAAAGAATGATGTAATG Qy 233 GCCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA Db 284 GGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGGAATGGTTATTCCAGTCATCTCTTTATGA	Query Mat Best Loca Matches 4

, 9	₽ &	p &	B 8	B 63	р 8	B 8	р <i>Q</i>	Db Qy	p	B 6	Db Qy	p Q	B &	B &	B &	B &	dg VQ	φ Q
2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	2153 GGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCT 2152	2033 TITTATCTCCACTGCATCGAAGTGGGAGGACGAGGACAATTACCACACCAGCTTCCTTT 2092	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCC 2032 	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852 	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732 	1613 GCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672 	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1612	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC 1552 	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGC 1492 	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 1312	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252
																		. <u>.</u>
Ś	B &	D Q	B &	B 8	B 8	B 8	B Q	Db Q	û b Qy	P &	B 8	B 8	B 8	B 8	Db Qq	g Qy	dg dg	Ъ
3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	3293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352	283	173 223	113 163	053 103	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGGTCAGGTAGGTA	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	2753 GATGCTARAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGACAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA 2752	2633 TATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACT 2692	2573 TTTTCTTGTTCACAAAAAATTTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTT 2572 				

Query Match Best Local Similarity 99.9%; Matches 4683; Conservative 0	4433 AAAGTGCTGGTCAACGATTTGAGTTAGTTTTTTAGATATACATTGAAATCTTTAATCAGAC 4492
; ICCATION: 1, 5144, 5145; ICCATION: 1, 5144, 5145; OTHER INFORMATION: n = A,T,C o: US-10-357-930-27149	4373 GCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGG 4432
8 8	4313 CCGACTTGGTTATGGGGATGATGAGGCCGCACAGACCTCACTAGTTGTGCACAAATAATGT 4372
	4253 ACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGA 4312
	4193 CCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG 4252
PRIOR APPLICATION NUMBER: 60/20 PRIOR FILING DATE: 2000-05-25 PRIOR APPLICATION NUMBER: 60/21 PRIOR FILING DATE: 2000-66-0/21	4133 GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCTAGTTGCTG 4192
	4073 TATCAGCTACAATGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCTTTTTTGGGG 4132
CURRENT APPLICATION NUMBER: US/ CURRENT FILING DATE: 2003-02-0 FRIOR APPLICATION NUMBER: 09/78	4013 AGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT 4072
NVENTION: 1 NVENTION: NVENTION: NVENTION:	3953 CGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAGG 4012
GENERAL INFORMATION: GENERAL INFORMATION: APPLICANT: Schlegel Robert APPLICANT: Bndege, Wilson APPLICANT: Monaban John	3893 ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 3952
RESULT 13 US-10-357-930-27149 US-10-357-930-27149 ; Sequence 27149, Application US/1	3833 CCATTGAGTTTTGATCAGTTGTGAATAGAGTGCCAAAGCCATGGCCAAGCTGTTTTTTGGAA 3892
Db 4903 TGGCTGG 4909	3773 GAGAGAGGCTTTAGTGAGGAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 3832
2 4 d 0 60 - 1 4 0	3713 CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT 3772
	3653 GGTACAAATTGCTGAGGAGAAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG 3712
4723	3593 AATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAA 3652
4663	3533 CAAAGCAGAIGTTITTGCCCTITCTGCTTCACTGCAIGGAIACAGIIGGIAAAAIGIAAT 3592
4603 4613	3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAG
Db 4543 ATTCTCAAGTTTCACACAGTGT Ov 4553 GTTCACCACTTTCCAGAGTGT	3463 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA
Oy 4493 ATTCTCAAGTTTCACACAGT	TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGTA

밁 ક 밁 S

Pred. No. 0; 0; Mismatches

DB 18; ω --

Indels Length 5145;

1;

Gaps

1;

유

밁 ঠ 몽 S 밁 S 밁 ঠ 밁 S 문 5 ₽ 5 8 δ 밁 5 밁 ঠ 문 S 밁 ક 밁 Ş 밁 ર્શ 밁 ঠ 밁

```
ANT: Schlegel. Robert
ANT: Schlegel. Robert
ANT: Monahan, John
OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
OF INVENTION: NUVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
OF INVENTION: HUMAN PROSTATE CANCER
LEFERENCE: MRI-007DEN
TY APPLICATION NUMBER: US/10/357,930
TY FILING DATE: 2003-02-04
APPLICATION NUMBER: 69/785,276
FILING DATE: 2003-02-16
APPLICATION NUMBER: 60/183,319
FILING DATE: 2000-02-17
APPLICATION NUMBER: 60/183,319
FILING DATE: 2000-02-17
APPLICATION NUMBER: 60/207,454
FILING DATE: 2000-05-25
APPLICATION NUMBER: 60/211,314
FILING DATE: 2000-06-09
APPLICATION NUMBER: 60/219,007
FILING DATE: 2000-07-19
APPLICATION NUMBER: 60/219,007
FILING DATE: 2000-12-13
COF SEO ID NUMBER: 60/255,281
FILING DATE: 2000-12-13
COF SEO ID NOS: 62232
RE: FBSESQ for Windows Version 4.0
Y: misc_feature
N: 1, 5144, 5145
NFORMATION: n = A,T,C o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0-27149
0149, Application US/10357930
1 No. US20040259086A1
ORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGGCTGG 4859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGAAGGGGTGGCCTCCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGC
                                                                                         Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TECTES 4909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGAAGGGGTGGCCTCGGAGGCTCTGGAGCTGCTTGGATGTCTTTAGGTGGGGTGG
                     ဝူ
                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FOR
THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4852
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4792
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4552
```

B 5	유왕	ρ Q	B 6	p 9	g 9g	유 왕	р _Q	B &	B 6	B 8	Db Qy	D 99	B &	B 64	B 8	A 4	g Q
1193 ITTIGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252 		1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132 	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCIGCTIGCAGGIGGGITITGCIGAGTICTCTCGGTTGTTTCCCTGGCCTCTGTGAAGGAA 952 	833 CTICAGACTGTTTICTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	653 CATCCCACATITTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652 	533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592	473 ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG 532 	413 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472	353 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC 412 	293 ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA 352 	233 CGCTGGCTGCTCCAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA 292	173 GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG 232
	_										.						
8 8 1	\$ \$ \$, P 6	B 8	B 8	B 8	당 왕	g Q	g 49	B 5	B 8	dd dd	B 8	₽ &	P 69	B 8	P 62	DD QQ
2333 GGCGGCAGAAGCCAAGTGACAGACTGACTGAGAGCTGGCATGAAGAGAGCCCCT	2213 TEGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT	04	93 44	2033 TITTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT	973 024	1913 GTCCTGATRAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 	733 784	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCGCTGGTACAGG	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCGCCA	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC	1433 AGAACCAGACTIGGAGCATCAGGGCCAAAGAGAGCTCAAGCTGCAGCTGCACCTGGAGAAGC	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATA 1432 	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA

\$ \$ \$	B 8	g <i>Q</i>	DB Q	р <i>Q</i>	g &	용 성	망왕	Db Qy	Db Qy	g Q	Q dd	Db Qy	B 8	B 8	B 8	B &	da
3353 TGGCAACATCAAGCATTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC	293 CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 335	3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	3053 TGACAGCCGAGGGACACGAGCATCTGCTGGACGGACCATTAGGGGCCTTGCCAAGG 3112	2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	2933 TAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGTAG	2873 GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT 2932	2813 TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCCTACCATTTTCAC 2872	2753 GATGCTAGAATCCCCCCTAGACGGAAGAAACCATTTTATTCAGTGAATTACACATCCTC 2812	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTAACAAAAATGGAAGGGCA 2752	2633 TATTITIGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCCAGTTGTTACT 2692	2573 TITTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	2453 AGAACAGGTCACGGGAAAGAGCTGGGGAAAGTGGGCAGTCAGT	2393 TIGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGA	2384 GGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCCGGCGAGCTGGCATGAAGAAGACCCCCT 2443
Qy Db	\$ B ;	8 8 8	\$ B &	, B &	}	₽ &	g Q	, § &	8 8	B &	g &	8 8	B &	B 5	}	? B &	B B
AAAGTGCTGGTCAACGATTTGAGTTATGTATTTAGATATACATTGAAATCTTAATCAGAC 4542 4483 ARTCTCAAGTTTCACACAGTAGTTTTTTAGATATACACACAC		4373 CCTATGATGAGGTTAAAAGTGAAAGGCAGAAAGAGGGTCAGCACTTATTGTTATGATAATGT 43/2 4363 CCGACTTGGTTATGGGGATGATGAGCCGCACAAACCTCACTAGTTGTTGCACAAATAATGT 44/22 4363 GCTATGATGGGGTTAAAAGTGAAAGGCAGAAAAGAGGGTCAGCCGCATTGTTATGATACTGGG 44/32	ACTTCARGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATATGACTCAACACAGA	CTCGTATCTCAGGITTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTG	GTGGGGCTGGGCGGGTGTTGTCATTGTTCTTTCCCTTTCCTGTAACTGTCGCTAGTTGCTG	TATCAGCTACAATGTGGGTCCTCTTTGAAGCCTTAATTCACAACAGCAGCTTTTTTGGGG 	AGGICACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTT	GTCCTCAGTCTCAACCTACAATCACTGTATGAAATCGGTCCTGGCAGCTGAACATAGG	ACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGGG 	CATTGAGTTTGATCAGTTGTGAATAGAGTGCAAAGCCATGGCAAGCCGTTTTTGGAA	GAGAGAGGCTTTAGTGAGAAAGGAATATTCAGAATAAAACGGTTGAGAAAGCTGAGAAGA 	CATGCGATGGGGCTGATGTTTCTATGATTGCCTCAGACTTTCACATTTACTAGTAGGGCT	GSTACAMATIGETGAGGAGAAGCAGGAAMACCTGTTTCCTTAGTGGCTTTTATCCCCTCGG GTTACAAATTGCTGAGGAGAAGCAGGAAAACCTGTTTCCTTAGTGGCTTTTTATCCCTCGG	ARIA I GOLAGANI I I I A I AGAMAN I I CU I AGAMAN I ANAI I I GOLAGAN I I ANGIMAN I ANGIMAN I ANGIMAN I ANGIMAN I ANGIMAN I ANGIMAN I I ANGIMAN I I ANGIMAN I I ANGIMAN I I I I I I I I I I I I I I I I I I I		ANGCARANTEGRATITATITGGGTTGGTAGCAGAGCAGCACCTTCAAATTCTCAGC	3463 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA

GCTTTCAGTCCAGTGTAAAGCTG 	1.0%; Score 4413; DB 18; Length 5145; 9.9%; Pred. No. 0; Ve	; NAME/KEY: misc_feature ; LOCATION: 1, 5144, 5145 ; OTHER INFORMATION: n = A,T,C or G US-10-357-930-28675		NUMBER SOFTWA		FRIOR FILING DATE: 2000-03-16 FRIOR APPLICATION NUMBER: 60/211,314 FRIOR APPLICATION NUMBER: 60/211,314	PRIC		TITLE OF INVENTION: HUMAN PROSTATE CANCER TITLE OF INVENTION: LIDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER	; GENERAL INFORMATION: ; APPLICANT: Schlegel. Robert ; APPLICANT: Endege, Wilson	RESULT 14 US-10-357-930-28675 IS-quence 28675, Application US/10357930	Oy 4853 TGGCTGG 4859 Db 4903 TGGCTGG 4909	4793 GCGAAGGC	4783	4723 TAGGGTTCTCTTGGCCATGGTCCCTTCCTTCGGAACTGTGATGTAGTCACATCCTAC		QY 4613 TCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTTCTGTCATT 4672	QY 4553 GTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTTAAGAAAGGAAAGCAGTAGC 4612
Qy db	P &	Qy db	Qy dd	g 8	B &	Db Qy	D Q	Db Qy	Qy Db	da Vo	D Qy	d dd	Qy	B &	Db	8 8	B &	Qy
	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	1133 ACTITATICCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	1013 CAACCCGAAFTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072 	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 952 	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892 	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772 	653 CATCCCACATITIGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712 	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652 	533 TIGICATGGCCCATGAGAIGATTGGAACTCAAAITGTTACTGAGAGGTTGGTGGCTCTGC 592	473 ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG 532 	413 AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC 472				233 CGCTGGCTGCCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA 292

3473 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGGAGCAGCAGCACCTTCAAATTCTCAGC 3532	ργ	393 TTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAG 24	\$ {
3413 ANTCANAGATTGTTTANAITGGATTGTCNATCCTTTANATNAAGATGAACTTGGTTTC 3472 	dg Qy	2333 GGCGGCAGAAGCCAAGTGAACAGAGCTGACTCGCGGGGGGAGCTGGCATGAAGAAGAAGACCCCT 2392	3 S
403 TGGCAACATCACGATTTAAGCTTAAGGTTGGGAGGCTAACGAGTCTACCTCCTTTTGTA	Db Cy	2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	음 성
	5 B 2	2213 TTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	음 성
323 CCARTICAAACIGICTAIGCACAAAATICCCGIGGGCCTAGAIGGAGATAATITITTITIT	S B 8	2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATT 2212	음
223	} B &	2093 TCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGGCCTGGGCCTTAAGGGCT 2152	B 성
163	, B &	2033 TTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2092	유 성
103) D (4	1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGGTCCC 2032	유 왕
	? B &	1913 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1972 	B
TAGUEGET SANSKUL BAGUCASUL I 1895GET LEGET KAGET KAGET KAGUCET ST. TAGUEGET KAGUCET ST. TAGUEGET KAGUCET ST. TAGUEGET KAGUCET ST. TAGUEGET TAGUEGET KAGUCET ST. TAGUEGET TAGUE	? B &	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCA 1912 	B 8
2073 GIIGUGALA IAMBANA (CIAMAIAI MAGALII GICUSACCUII COMACAI AGAGACC 2002 2023 GIIGIGCIA CIAAGAGAICICAAA TATTAGICTITGICCGGACCCTTCCATAGIACACCT 2082 2023 GIIGIGCIA CATAGAGACATTAGAGAGATTAGGATAGAACCCTTCCATAGIACACCT 2082	S B &	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852 	유 장
1911 1 1 1 1 1 1 1 1	? B &	1733 CCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC	ያ
	\$ B &	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 1732 	B
	D 4	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 1672	B 8
	? B 5	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACACAGGCCCGTGCATCCCGCCA 1612	B &
TITICITGITCACAAAAAATTCCCCGTAAATCGAAATATATATATGTACATACA	p 29	1493 CANATGAACCTGTCCCTGCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGACGCCCCTCAGTC 1552	B 8
IGAAATCATIGAGGICICCIGAGAAGAAGACACIIGIGACIICTATAGACATITIII	p 58	1433 AGAACCAGACTTGGAGGCTAGAGGCCAAAGAGCAAACTTCAAGCTGCTGCACCTTGGAGAAACC 1492	B 8
) B &	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTA 1432 	유 성
		1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	<u> </u>

3773 GAGGAGAGCTTTAGTGAGAACAAATAAAACGGTTGAGAAACAGAGAGAAGA 3832	3523 AAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGGAGCAGCAGCACCTTCAAAATTCTCAGC 3582 3533 CAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAAT 3592
Db 4903 TOCUTED 4909 RESULT 15 US-10-648-593-115 US-10-648-593-115 US-10-648-593-115 US-10-648-593-115 PRINCELANT: BLIEGOLOMOLOGIJANI GENERAL INFORMATION: APPLICATOR UDENCATION OF CENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT 17115 OF INVESTIGATION OF CENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT 17115 OF INVESTIGATION OF CENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT 17115 OF INVESTIGATION WINDERS (05/106/48).593 PRIOR FILING DATE: 2002-08-27 NUMBER OF SEQ IN DAG: 557 PRIOR FILING DATE: 2002-08-27 NUMBER OF SEQ IN DAG: 557 PRIOR FILING DATE: 2002-08-27 NUMBER OF SEQ IN DAG: 557 PRIOR FILING DATE: 2002-08-27 NUMBER OF SEQ IN DAG: 557 PRIOR FILING DAG: 557 PRI	4613 TCCTTC 4663 TCCTTC 4673 TAGGGC 4673 TAGGGC 4773 TAGGGCTT 4773 AGCCTT 4773 AGCCTT 4773 AGCCTT 4773 GCGAAG 4793 GCGAAG 4843 GCGAAG

B & B & B & B

중 음 중

음 성 음

Ś

음 성

뮍

5 B 5

음 성 음

Ş В Ś 멍 S 음 성

음 성 음

Ś 밁

유

\$ B \$	B &	B 8	문 &	ያ ઇ	g &	문왕	<u> </u>	B &	B 8	<u> </u>	B &	දු දු	<u> </u>	<u>ል</u>	B 8	පී දි	₽
1735 TTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGC 1794	S CTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCC	1615 GTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCG 1674	1555 CCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACGAAAGGCCCGTGCATCCCGCCAGC 1614	1495 AATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCA 1554	1435 AACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCA 1494	1375 ACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAG 1434 	1315 ATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1255 GTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATC 1314	1195 TTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAAGCCTCCAATGGATGT 1254 	1135 TITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATT 1194	1075 ATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGAC 1134 	1015 ACCCGAATCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTG 1074	955 TCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCCTACCTGTTGCCAACATTGGGGCCA 1014	895 CTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAA 954	835 TCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGGAAGAGCTTCAACTCTGTTCAC 894	775 GATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	361 CAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATT 420
									-								
ob Oy	Q B	S B S	р Q	B &) B &	B &	B &	}	}	B &	}	?	, B &	\$ B Q	, B &	, B &	Db
			TTTTTGGAAAATGGAGCTATGGTGTAAAAGCAAGGTGGATCAACCCAGTTGTTACTCT	TTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	GAARICATTGAGATCTICCTGAGAAGAAGACACTTGTGACTACTATAGACAATTTTTTTT	AACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCTAGCTTTTTCGGGCAGCATG		COSCASSASCICARS I CACASSASCICACA COCCOSCASCASCICA CARACTERISTICA COCCOSCASCASCICA CARACTERISTICA COCCOSCASCICA CARACTERISTICA COCCOSCASCICA COCCOSCASCICA COCCOSCASCICA COCCOSCASCASCICA COCCOSCASCASCICA COCCOSCASCASCICA COCCOSCASCASCICA COCCOSCASCASCICA COCCOSCASCASCICA COCCOSCASCASCASCASCASCASCASCASCASCASCASCASCAS		GCCACAGAGICCTCACACTICTACTCTGCCTCACCCATCTACGAGGCAGGCAGTCACCAGCTACCAGGCAGG	CACTICGATATICTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTT CACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTT CACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCAGCTGGTATTTT CACTCGGATATCTTTGGCCCCCCAGACCTTCTACCCCTTCCCTGACCAGCAGCAGCTGGTATTTTT CACTCGGATATCTTTGGCCCCCCAGACCTTCTACCCCTTTCCCTGACCAGCAGCAGCTGGTATTTTT CACTCAGATATCTTTACACTGTACAGCTGTACCCTTTCCCTTGACCAGCAGCAGCTGGTATTTTT CACTCAGATATCTTTACACTGTACAGCTGTACAGCAGCAGCAGCTGGTACTTACACACTTTTACACTGTACAGCAGCAGCAGCTGGTACTTACACACTGTACAGCAGCAGCAGCTGGTACTTACACACTTTACACACTGTACAGCAGCAGCAGCTGGTATTTACACACTTTACACTACACACTGTACACACAC	GGCCTTTCCACCAGCCAGCACCACCACAAGTCTGCTGGCCTGGGCCTTAAGGGCTGG		CAGAGCAATGCATTGCATTCGGTCAGAACCAGCAGCAGCAGCGCCCCAGAGGTCCCTT	915 CCTGATTAAGGAGGAAGCCCAGGACCCCAAGAAGCTGCAGACCGCCAGGCCCTTCAGACAGC 916 CCTGATTAAGGAGGAAGCCAGCCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGC 561 CCTGATTAAGGAGGAAGCCAGCCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGC	ARCAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGACAGACTCCCGAAACCAGT	TTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACC 1

\$\frac{1}{2}\$ \frac{1}{2}\$ \fra

2905 GEGCTHANCICAMACHANICATICCOMAGGTCATTCACAMACCCACCCTTOCTACTOR 2639 2905 GEGCTHANCICAMACHANICATICCATATCCAMACCCACCCTTOCTACTOR 2639 2015 ACAGCCANGGGAACACAGACATACATTCCACAGACACATTCACAMACCCACCCTCACCTC 2639 2015 ACAGCCANGGGAACACAGACATCATACATACAGACACATTCACAMACCCACCCTCACCTC 2639 2015 TACCTTAGACAMACCACACACATCTCATACAGACACATTCACAMACCCACCCTTCACCCACCTTCACCACCTCACCTC 2639 2015 TACCTTAGACAMACCACACACTTCTACAACATCACACCATACATTCACACCTCACCTCACCTCACCTC 2639 2015 TACCTTAGACAMACCACACACCATTCACAACATCACACCTCACACTTCACACCTC	
\$ B	ργ
4015 FICACITICAL ANDROGOGIC CONTINUADA CONTI	4015 GTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGCTTGAGTTTTA 4074

8 8 8 8 8

252 TCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC	132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAGTCCAGTGTAAA 192 GCTGTTGGAGCGCGGAGCAAAGGTTAAAGAATGATGAATGCGCTGGCTG	Qy 72 GCGGCGCCTCGCAAGTCCGGGAGGGGGGGGGGGGCCCGAGGGGAGACGCCGTGACAACTTT 131	Qy 12 GAGGAGGAGGGACGGGACGGGACGGGACGGGAGCGGAGCGGCCCTCTCGGCTCCGCG 71	Query Match 63.9%; Score 3482; DB 17; Length 3766; Best Local Similarity 99.9%; Pred. No. 0; Matches 3752; Conservative 0; Mismatches 3; Indels 1; Gaps 1;		17 3766 A	> ×			PRIOR APPLICATION NUMBER: PCT/US01/23716 PRIOR FILING DATE: 2001-07-26 PRIOR PRIOR APPLICATION NUMBER: US 60/221,679 PRIOR FILING DATE: 2000-07-28	; TITLE OF INVENTION: PROTEIN PHOSPHATASES ; FILE REFERENCE: PI-0173 PCT ; CURRENT APPLICATION NUMBER: US/10/343,357 ; CURRENT FILING DATE: 2003-01-28	GRIFFIN, Jennifer A.; BAUGHN, Mariah R. YUE, Henry; WARREN, Bridget A. NGUYEN, Danniel B.; CHAWLA, Narinder K. KRARNEY I.am	WANG, Yumei E.; STE GANDHI, Ameena R.; LEE, Ernestine A.; LU. Dyung Aina M.;	GENERAL INFORMATION: APPLICANT: INCITE GENOMICS, INC., TANG, Y.Tom APPLICANT: ELLIOTT, Vicki S., RAMKUMAR, Jayalaxmi APPLICANT: VAC Monicie G. HIPEOND Neil	RESULT 16 US-10-343-357-17 ; Sequence 17, Application US/10343357 ; Publication No. US20040058141A1	
Q Db Qy	Oy Ob	Qy Oy	Q B Q	ත දි	Оу	ОУ	p &	Qy Db	Qy Db	Qy	p &	da VQ	עם מם	Qy Db	p Q	 Db
1332 GICTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTT 1391	1212 ĀTĊĀĠŦĀĠĀŦŦŦĊĀŦŦĠĀĠĀĀĀĠĊĀĀĀĠĊĊŦĊĊĀĀŦĠĠĀŦĠŦĠŦŦĊŦĀĠŦĠĊĀĊŦĠŦŦŦ 1271 1272 ĀGCŢĠĠĀŦĊŢĊĊĠĊŢĊĊĠĊĊĀĊĊĀŢĊĠĊŢĀŢĊĠĊĊŢĀĊŖŢĠŖĀĠĀĠĀĊŦĠŢĠŖĊĀŦ		1092 TGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCA 1151	32 TCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGAT 	972 CIGCATTICTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAAITCTTCCCAA 1031	912 TGCTGAGTTCTCCGGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971	852 TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911	792 TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731	612 AGIGCTGCTAATIGATAGCCGGCCATTIGTGGAATACAATAC	552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAA 611 	492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551 	432 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACCATTACATCATC 491	372 GGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCCAGTCACCACCACCAGCCTGACC 431	312 TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAGAGACATTCACTT 371

CAGAAGCTGCCAAATTGGAGAGAGAGCATCATGAGAAAAGCAGTCACGGGAAGA 2471 CAGAAGCTGCCAAATTGGAATTTGGAGAGAGACCCCTTTGAAAAGCAGTTTAAACG 2411 CAGAAGCTGCCAAATTGGAAATTTGGAGAGAGACATGTCAGAGAAAAAGCAGTCACGGGAAGA 2471
<u> </u>

Qy 432 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACCATTACATCATC 491	Qy 372 GGAGGGCTCTTGCTGAAAATGGGTTTTAACTCTCCTTTTGCCAGTCACCACCAGCCTGACC 431	Qy 312 TTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAAAGAGACATTCACTT 371	Qy 252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC 311	Qy 192 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCTG	Qy 132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAA 191	Qy 72 GCGGCGCCTCGCAAGTCCGGGAGGGGAGGGGGGGCCCGAGGGGAAGACGCCGTGACAACTTT 131 Db 226 GCGCGCCTCGCAAGTCCGGGAGGGGAGGCGCGGAGGGGAGACGCCGTGACAACTTT 285	Qy 12 GAGGAGGAGGGGACGGGACGGGACGGGAGCGGAGCCGCCTCTCGGCTCCGCC 71	Query Match 59.4%; Score 3238; DB 17; Length 3625; Best Local Similarity 99.9%; Pred. No. 0; Matches 3458; Conservative 0; Mismatches 2; Indels 1; Gaps 1;	S-1	NUMBER OF SEQ ID NOS: 73128 ; SEQ ID NO 26234 ; LENGTH: 3625 ; TYPE: DNA	TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement FILE REFERENCE: 38-21(53313)B CURRENT APPLICATION NUMBER: US/10/425,114 CURRENT FILING DATE: 2003-04-28	APPLICANT: Screen, Steven E APPLICANT: Tabaska, Jack E APPLICANT: Cao, Yongwei TITLE OF INVENTION: NUCLeich	GENERAL INFORMATION: APPLICANT: Liu, Jingdong APPLICANT: Kovalic David K	RESULT 17 US-10-425-114-26234 ; Sequence 26234, Application US/10425114 ; Publication No. US20040034888A1	3731 TTCTATGATTGCCTCAGACTTTCACATTTACTAGTA	3671 AAGCAGGAAACCTGTTTCCTTAGTGGCTTTTATCCCCTCGGCATGCGATGGGGCTGATGT	Db 3611 GGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGGTACAAATTGCTGAGGAG 3670 3672 AAGCAGGAAACCTGTTTCCTTAGTGGTTTTTTTTTTTGGGATGGGGTTGGATGGGGGTGGATGGT 3731	Oy 3612 GGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAAAGGTACAAATTGCTGAGGAG 3671
d dy	D &	S B 8	S B 8	? B &	;) B &	P 5	B 5	} B &	D Q	B &	Qy	B Q	D Q	D Q	do Qy	dg VQ	Db
1512 TGTCTCAGAGGTGGACAGAAAGGGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGC 1571	ASSECTAMENT AND COMMENT OF CONTROL OF CONTRO	ACCECTOR DARAGE CAN ACTION OF CONCENT CONCENTRATION OF THE CONCENTRATION	1332 GLUILIONALGENGCILACAGNILIGI GAMAGGAMAGAMGACUACLACLACATATICI COMMENTE 1331	ANGLIGUEST CICCUGCICUGCCACCAICECIACACCACAACACAACAACAACAACAACAACAACAACAA	ALCAGINGALII CALIGONAMOCHAMOCCII CAMIGONIGE I CIAGINGALII CAGINGALII CALIGONAMOCA COLIC CO	TTTCCTGCGTGTGCCTGTGAATCACACTTTTGTGAGAAAAATTTTGCCGTGGTTGGACAA	TIGGTTATIGTTTAAATIGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCA	CITED TO THE CHARGE WATER TO THE CHARGE WE SHOULD BE A CHARGE WATER TO SHOULD BE A C	CTGCATTTCTCAGCCTTGCCTTACCTGTTGCCAACCATTGGGCCAACCCGAACTCTTCCCAA	912 TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971	852 TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911	792 TGTAGITTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCAC 851	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAA 611 	492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551	TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACCATTACATCATC

; SOFTWARE: I ; SEQ ID NO 1 ; LENGTH: 3:	<i>1</i> 4,	융 .
	>-	중 格
; TITLE OF II	259	Ş
GENERAL INFO ; APPLICANT: ; APPLICANT:	2472 GCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTC 2531	8 8
; Sequence 1,	566	뭥
RESULT 18	2412 CAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGA 2471	δ
Db 3585	2506 CAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACG 2565	В
Оу 3432	2352 CAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAAAAGCAGTTTAAACG 2411	Ş
Db 3525		Вb
Qy 3372		Ś
Db 3465	2386 CTTTCTACTTCTACTCTACTCTACCTACTCTACTTTACTCTTACTCACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCTACTCACTCTACTCTACTCAC	문 4
0у 3312	CHARACTER TARCECT I CELTRACEA GETTAITTTTGCCACAGAGTCCTCACA	9 8
Db 3405	1/2 CCCCCACACACCACCACACACACACACACACACACACA	}
Оу 3252	172 CLUCULA INTERCALLACION CONTRACTOR CONTRA	\$
Db 3345	GCACCATCATCATCATCATCATCATCATCATCATCATCATC	망
Оу 3192	GCAGCACCTCACGAAGTTCTTGCTTGCCTTGCCTTTTAACGCCAACTTCTTAAAGTCACTATTTTGCCCA	Ş
Db 3285	ACCEPTATE TO THE PROTECTION OF	Db ·
Qy 3132	AAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTTCCACCAGCCA	Ş
Db 3225		멍
Qy 3072	2 TTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCG	Ş
Db 3165	CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACCAGAGCAAGCGATTGCA	멍
Qy 3012		Ş
Db 3105	2026 CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCTGATAAGGAGGAAGC 2085	Дb
Qy 2952		Ş
Db 3045	966 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT	뮍
Оу 2892	812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT 187	8
Db 2985	906 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAAAAGA	D.
Оу 2832	752 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGA	Ş
Db 2925	846 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATACCAA	ర్జ
Qy 277	692 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTC	β
Db 286	786 CGTGCAGCCGTTGGTTAGAGGACAGCCCGCTGGTTACAGGCGCTCAGTTGGACTTTCAACTT	뮹
Оу 271.	632 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTCAG	Ş
Db 280	1726 TACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCAGCCAG	뭥
Qy 265	_	β

```
12 ATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC
                                                                                                                                                      ŝ
                                                                                                                                                                                                                                                                                                                                                                                                                         32
                                                                                                                                                                                                                                                                                                                                                                                                                                                               25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   52 GCTTGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          32
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    <u>5</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      52
                                                                      GCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTTTGTAAATCAAAGAATTGTTTAAA
                                                                                              GCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAAATCAAAGAATTGTTTAAA 3431
                                                                                                                                                GAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTAA
                                                                                                                                                                                  GAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTAA 3371
                                                                                                                                                                                                                        AGGCATTGTGAATAGGTAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTATG 3251
                                                                                                                                                                                                                                                                                                                                                                                                     AGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACGA
ATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3625
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCC
                                                                                                                                                                                                                                                                                                    AGGCATTGTGAATAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATG
                                                                                                                                                                                                                                                                                                                                                                                 AGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCATATCTGGTAGCCCATTTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCATCACTCTGCTGGACGGACCATTAGGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCTTGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACGTTGTTGCTACTAAGAGAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAAGCAAG 2831
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGATGCTAGAATCCCCCCTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCAGATGCTAGAATCCCCCCCTA 2771
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTCTTAACATCTGCATTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTCTTAACATCTGCATTTG 2711
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTCTTTGGTGTTGGAGACAAATCCCCTACCATTTTCACGTTGTGCTACTAAGAGATC
                                  3472
                                                                        3584
                                                                                                                                                  3524
                                                                                                                                                                                                                          3464
                                                                                                                                                                                                                                                                                                                                                                               3344
                                                                                                                                                                                                                                                                                                      3404
                                                                                                                                                                                                                                                                                                                                                                                                                     3191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3011
                                                                                                                                                                                                                                                                                                                                                                                                                                                           3284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3044
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2984
```

US-09-964-277-1

US-09-964-277-1

; Sequence 1, Application US/09964277

; Patent No. US20020137170A1

; GENERAL INFORMATION:
 APPLICANT: Luche, Ralf M.
 APPLICANT: Wei, Bo
 TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
 FILE REFERENCE: 200125-434

; CURRENT APPLICATION NUMBER: US/09/964,277

; CURRENT FILING DATE: 2001-09-25

; NUMBER OF SEQ ID NOS: 22

; SOFTWARE: FASTSEQ for Windows Version 4.0

; SEQ ID NO 1

; LENGTH: 3496

; TYPE: DNA

\$ \$ \$	р Q	<u> </u>	용 성	р У	B &	В Q	<u>გ</u> გ	B &	g &	D Qy	g Q	පි හි	g Q	Db Qy	B 8	Query Best Match	; ORG
912 TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCGACTCTAGTCCCTAC 971	52 76	792 TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731 	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	552 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAA 611	492 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT 551	432 TCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGCACCACCACCATTACATCATC 491	372 GGAGGGCTCTTGCTGAAAATGGGTTTTAACTCTCCTTTTTGCCAGTCACCACCAGCCTGACC 431	312 TTTGTGGACGAGTCCTTTGCAAGAGCACATCAACGGGAAAGAGAGAG	252 TCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATGTGAGGGGCTGC 311	192 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCTG	132 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGCCCCAAAAGCTTTCAGTCCAGTGTAAA 191 	72 GCGGCGCCTCGCAAGTCCGGGAGGCGAGGGGGGGCCCGAGGGGAGACGCCGTGACAACTTT 131	12 GAGGAGGAGAGCGACGGGACGGGACGGGAGCGGAGCGG	Query Match 57.2%; Score 3118; DB 9; Length 3496; Best Local Similarity 99.9%; Pred. No. 0; Matches 3458; Conservative 0; Mismatches 2; Indels 2; Gaps 2;	ORGANISM: Homo sapiens 09-964-277-1
-				·							_						
D AY	&	} ₽ Q	ρ Q	, B &	g g s) B &	P \$	\$ B &	2 B 8	, p &	, B &	B &	dg VQ	, p. 5) B {	? B &	\$ B
016 TTCGGTCAGAACCAGCAGCAGCAGCGCCCAGAAGGTCCCTTTTATCCTCCACCAGCCAG	956	872	812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT 1	ATCAGITICATATICAGCAGCATGGCAGCATCCTTACATGGCTTCTCTCATCAGAAGA 1 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCTCTC	TOUGHAGACAGGC IGGAAGACAGCAATAAGC ICAAGGGGTCCTTCTCTGGGATATCAAGCTCCGGAGACAGCAGATATCAA	32 CETECHACCETICECTETTAGAGACAGECCECTGETACAGCCCTCAGTEGGCTEGACCT 56 CETECHACCETCGCTCGTTAGAGAGACAGCCCGCTGGTACAGGCCCTCAGTGGGCTGCACCT 56 CETECHACCETCGCTTAGAGAGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 57 CETECHACCAGCTGGTATAGAGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 58 CETECHACCAGTGGTATAGAGAGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 58 CETECHACAGCCGTTGGTATAGAGACAACCCT 59 CETECHACAGCCGCTGAGAGACACCT 50 CETECHACAGCCGCTGAGAGACACCT 50 CETHACAGCAGTTGGTATAGAGACACCT 50 CETHACAGCAGTTGGTATAGAGACACCT 50 CETHACAGCAGTTGGTATAGAGACACCT 51 CETHACAGCAGTTGGTATAGAGACACCT 51 CETHACAGCAGTTGGTATAGAGACACCT 52 CETHACAGCAGCTGGTATAGAGACACCT 53 CETHACAGCAGCTGGTATAGAGACACCT 54 CETHACAGCAGCTGGTATAGAGACACCT 55 CETHACAGCAGCTGGTATAGAGACACCT 56 CETHACAGCAGCTGGTATAGAGACACCT 56 CETHACAGCAGCAGAGACACAGCCCGCTGGTACAGGAGAGAGACACCT 56 CETHACAGAGACACAGCAGAGACACAGCAGAGACAGACACAGACAGAGACAGAGACAGAGACAGAGACAGAGACAGACAGACAGAGACAGACAGAGACAGACAGACAGACAGAGACAAGACAACA	7 IACC LCAMAGE AS CASSACAMASSIC COSTSCANDOS CONSCISIONECANO COSTSCANDOS ISOCICANO COSTSCANDOS ISOCICANO COSTSCANDOS ISOCICANO COSTSCANDOS CONTRA CONTRA CASTSCANDOS CONTRA CONTRA CASTSCANDOS CASTSCANDOS CONTRA CASTSCANDOS CASTSCANDOS CONTRA CASTSCANDOS CASTSCANDOS CONTRA CASTSCANDOS CAST	THE TOTAL CANADAGE TO THE TOTAL CONTROL OF THE TOTAL CANADAGE TO	2 AGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAACCAAATGAACCTGTCCCTGC 5 AGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGC 76 AGGGCCAAAGAGCAAACTCAAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGC	CAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATC 1	332 GICIIIAGAIGAGCIIACAGAIIIGGAAAGAAAAAAACCIACIAIIAICICCAAACII	2 AGCTGGGATCTCCGGCTCCGCCACCATCGCTATCGCCTACATGAAGAGGATGACAT	212 ATCAGTAGATTICATIGAGAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTT 	152 TITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAA	1922 1931 Alba 1931 Amarico Cago I Alba Color 1944 1945	OS TECTITATE TEGES CAGGE AT A CONTRACT	996 CTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAA 1055

3071 AGC 3095 AGC 3131 CAC	2975 ĀĞ 1011 AA 1035 AA	2891 CT 1915 CT 1951 AG	832 To	2772 GA 2795 GA	2712 AG 2735 AG	2652 TA	2592 AT	2532 CT	2472 GC 2496 GC	2412 CJ 5 2436 CJ	y 2352 CJ	y 2292 Cu b 2316 Cc	y 2232 C	y 2172 C b 2196 C	y 2112 G b 2136 G
AGCATCACTCTGCTGGAC AGCATCACTCTGCTGGAC CAGTACCTCAGACAGGAA	AGCTTGGGGGTCAGGTAC AAATGATCCTATCCAAAC	CTCAAATATTAGTCTTTGTCCGGAC	TGTCTTTGGTGTTGGAG GTCTTTGGTGTTGGAG	ACGGAGGAAAACCATT ACGGAGGAAAACCATT	\GAGATCAGCTAATACT \GAGATCAGCTAATACT	TATGGTGTAAAAGCAAC	ATTCCCTGTAAATCTGA ATTCCCTGTAAATCTGA	CTGAGAAGAAAGACACTTGTGACTTI	CTGGGGAAAGTGGGCAGTCAG CTGGGGAAAGTGGGCAGTCAG	CAGAAGCTGCCAAATG(CAGAAGCTGCCAAATG(AGAGCTGACTCGCGGG 	CAGCTGCCCACTTGCC	TTCTACTCTGCCTCA TTCTACTCTGCCTCA	CCCCAGACCTCTACCCCTTC	GCAGCACCTCACGAAG
3CTGGACGGACCATTAGGGGCCTTGCC 	igetagetagaccctettage Caaagctgattcacaaacce Raagctgattcacaaacce		GTTGGAGGACAAAATCCCCTAC	CCATTTTATTCAGTGAATTACACATC	CTTCTCTAACAAAAATGGAAGGGCAGATGCTA 	\CAGGTGGATCAACCCA \CAGGTGGATCAACCCA	TCTGAAATATATATGTAC 	TGTGACTTCTATAGA	AGTCAGTCTAGCTTT7 	ICCAAATGGAATTTGGAGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGA 	CAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCC	CACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG	CTCTGCCTCAGCCATCTACGGAGGCAGTG	CCTGACCAC	Gaagtetgetgectgggettaagggttggeaet
AAGGTCTAC NAGGTCTAC	AGGACAGAGCTAGTGT OCCACGCTCACCTGACAGC	TCCATAGTACACCTTAGCGG	CCCCTACCATTTT-CACGTTGTGC	CACATCCTCTTGTTC CACATCCTCTTGTTC	GGAAGGGCAGATGCT GGAAGGGCAGATGCT	CAGTTGTTACTCTCTTA CAGTTGTTACTCTCTTA	acatacatatatatitttga catacatatatttttgga	CTATAGACAATTTTTTTTTTTTGTTGTTI CTATAGACAA-TTTTTTTTTCTTGTTV	TCTAGCTTTTCGGGCAGCATGGAAATCATTGA TCTAGCTTTTCGGGCAGCATGGAAATCATTGA	ATCATGTCAGAGAAC ATCATGTCAGAGAAC	BAGAGCCCCTTTGAAAAGC	TCTGTGCGCAGGCGG CTGTGCGCAGGCGG	AGTGCCAGTTACTCTGC AGTGCCAGTTACTCTGC	9CAGCTGGTATTTTGCCACAGAGT 	CTTAAGGGCTGGCAC CTTAAGGGCTGGCAC
CTTAGAGCAAACC 3	CAAGAG GACACG HIHHH GACACG	TGAGCC TGAGCC	AT AT	TAAAAAAG 	GAATC	PAACATCTGCATTTG	\$ <u> </u>	TTGTTCACAAAAAA TGTTCACAAAAAA	ATCATTGAGGTCTC	AGGTCACGGGAAGA aGGTCACGGGAAGA	AAGCAGTTTAAACG AAGCAGTTTAAACG)CAGAAGCCAAGTGA CAGAAGCCAAGTGA	GCCTACAGCTGCAG	ACAGAGTCCTCACA	TCGGATATCTTGGC
3130 3154	3034 3070 3094	2950 2974 3010		B 80	2771 2794	2711 2734	2651 2674	2591 2614	2531 2555	2471 2495	2411 2435	2351 2375	2291	2231	2171

유

В Ś 밁 Ś 밁 δ 밁 Ś 뭐 Ş В Ś 밁 Ś 밁 δ 밁 Ş 밁 ð

8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

```
GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUI

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUI

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3544

TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/YEV. CDC
       밁
                                                                           8
                       Š
                                                 Б
                                                                                                            밁
                                                                                                                                 Ś
                                                                                                                                                                밁
                                                                                                                                                                                      Ş
                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                               ; NAME/KEY: CDS
; LOCATION: (589)...(2583)
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 19
US-09-816-494-1
; Sequence 1, Application US/09816494
; Patent No. US20020034807A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 3299; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3455
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3431
                              473
                                                        464
                                                                                 413
                                                                                                            404
                                                                                                                                     353
                                                                                                                                                                344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3275
                                                                                                                                                                                         293
                                                                                                                                                                                                                     284
                                                                                                                                                                                                                                             233
                                                                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3191
                                                                                                                                                                                                                                                                                                  173
                                                  AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGGCTGAGCCTTTGAGC
               ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGGACTTATTG
                                                                                                       GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                        GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTTGCC
                                                                                                                                                          ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                         ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                               CGCTGGCTGCCAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTTATGA
                                                                                                                                                                                                                                                                                   GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATG
ACACCACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                              CGCTGGCTGCTCCAAAGCATCTTTTGTTGTAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                  GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC 3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TAGGCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCCAATTCAAACTGTCTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATGGGATTGTCAATCCTTTAAATAAGATGAACTTGGTTTC 3496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAGGCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTAT
                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                     56.5%;
                                                                                                                                                                                                                                                                                                                      Score 3079; D. Pred. No. 0; O; Mismatches
                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DUAL SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                              9
                                                                                                                                                                                                                                                                                                                       2
                                                                                                                                                                                                                                                                                                                                                  Length 3544;
                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                      Gaps
                         532
                                                                              472
                                                   523
                                                                                                      463
                                                                                                                                 412
                                                                                                                                                           403
                                                                                                                                                                                     352
                                                                                                                                                                                                                                         292
                                                                                                                                                                                                              343
                                                                                                                                                                                                                                                                   283
                                                                                                                                                                                                                                                                                             232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3394
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 3370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3250
```

ବ ନ ବ	B &	B &	Q Qy	Db Qy	g Qy	g . Q	B Q	g g	B &	gb Qy	Db Qy	Db Qy	D Q	Db Qy	g &	유 성	р Q
1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGACAAAGGCCCGTGCATCCCGCCA 1612	93 44	1433 AGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGGAAGC 1492	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTA 1432	1313 TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCACCATCGCCTATCGCCTACA 1312	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGAT 1252	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 1192	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 1132	1013 CAACCCGAATTTTTCCTAATCTTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 1072	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 1012	893 ACCTGCTTGCAGGTGCGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAA 952	833 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 892	773 TTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	713 AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA 772	653 CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC 712	593 TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA 652	533 TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC 592
Qy B	& A &	, B. 6	S & &	₽ \$	P \$? B &	?	S B 8	5 B &	\$ \$ \$? B &	, B &	2 B 8	P 5	}	당 5	S B
	2573 TITTUTTGITCACAAAAAATTCCCTGTAAATCTGAAATATATATATATGTACATATA 2632	General Call I ways is 1 CC sensementation of 1 is 1 i	AGAACAGGICACGGGAAGAGCIGGGGAAAGIIGGGCAGIICAGIITAGCIITITICGGGCAGCAGAAAGAAGAAGAAGAAGAAGAAGAAGAAGAA	TIGAAAAGCAGTITAAAAGGCAGAAAGCTIGCCAAATGGAATTITGGAGAGAGGATCATGTCAG	GCCGCAGAAGCCAAGGGAGACTGACTCGCCGCGGAGCTGGAAGAGAGAG	ACTOTOCCTACAGCTOCAGCOAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA	TISCCACASAS CCICACACITETACTIC SCCIACACACTICACACACTICACACACTICACACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACTICACACACTICACACACTICACACACTICACACACTICACACACTICACACACTICACACACTICACACACA	SUCACIO GALLA CI I SUCCEDENCACIO I RECONTRACIO CONTRACA C		TOTOTOTETTE OF A CONTROL OF A C		GTCCTGATAAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCCAGGCCTTCAGACA GTTCTTGATAAGGAAGCAAGCATCCCCAAGAAGCTGCAGACCCCCAGGCCTTCAGACA GTCCTGATAAGGAAGCAAGCATCCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	1833 CHARCHAIGCHAITCICCCCIGTTCAGGAACTATTGGAGCAGACTCCCGAAACCA 1912	OCITE CASAGAMENTO ELIMENTA CINCARCA CACTACIO ESSATSOSA OCITE CACTACIO ESSATSOSA OCITE CACTACIO ESSATSOSA OCITE CACTACIO ELIMENTO EL	CCITCICICIONE IA LAMA CHOSI LOS INTERNACIONES CARGACIONES ACCESTACA DE LA CARGACIONES ACCESTACADA DE LA CARGACIONES ACCESTACADA DEL CARGACIONE	CONTROL OF THE CONTRO	

```
RESULT 20
US-10-377-072-25
; Sequence 25, Application US/10377072
; Publication No. US20040009501A1
; GENERAL INFORMATION:
   APPLICANT: Millennium Pharmaceuticals Inc.
   APPLICANT: Curtis, Rory A.J.
   APPLICANT: Logan, Thomas Joseph
   APPLICANT: Glucksmann, Maria A.
   APPLICANT: Meyers, Rachel E.
   APPLICANT: Williamson, Mark J.
   APPLICANT: Williamson, Mark J.
   APPLICANT: Rudolph-Owen, Laura A.
   APPLICANT: Chun, Miyoung
   APPLICANT: Tsai, Fong-Ying
   TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
   TITLE OF INVENTION: AND USES THEREFOR
   FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                           음 성
                                                                                                                                                                                                                                                                                                                                                   뮹
                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                        뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      吊
                                                                                                                                                                                                                                                          3523
                                                                                                                                                                                                                                                                                  3473
                                                                                                                                                                                                                                                                                                           3463
                                                                                                                                                                                                                                                                                                                                                           3403
                                                                                                                                                                                                                                                                                                                                                                                                             3343
                                                                                                                                                                                                                                                                                                                                                                                                                                   3293
                                                                                                                                                                                                                                                                                                                                                                                                                                                               3283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2873
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2863
                                                                                                                                                                                                                                                          AA 3524
                                                                                                                                                                                                                                                                                  AA 3474
                                                                                                                                                                                                                                                                                                       TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGTA
                                                                                                                                                                                                                                                                                                                                                                                                      CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                       CTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC 3352
                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGGTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGACCATTAGGGGGCCTTGCCAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCCTACCATTTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTATTCAGTGAATTACACATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCCTACCATTTTCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGGCA
                                                                                                                                                                                                                                                                                                                                                                              3412
                                                                                                                                                                                                                                                                                                                                                       3462
                                                                                                                                                                                                                                                                                                                                                                                                       3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                          3342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2982
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2922
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2802
```

```
δ
                                                                               맒
                                                                                                                  Ś
                                                                                                                                                           밁
                                                                                                                                                                                            δ
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                               뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Homo Sapiens FEATURE: ; NAME/KEY: CDS ; LOCATION: (589)...(2586) US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
FRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2010-03-22
PRIOR PRIOR PRIOR DATE: 2011-03-22
PRIOR PRIOR PRIOR DATE: 2011-03-22
PRIOR RELING DATE: 2011-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 25
LENGTH: 35
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match 56.5%;
Best Local Similarity 99.9%;
Matches 3299; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        O NO 25
GTH: 3544
    704
                                        653
                                                                               644
                                                                                                                    593
                                                                                                                                                         584
                                                                                                                                                                                                533
                                                                                                                                                                                                                                       524
                                                                                                                                                                                                                                                                              473
                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                        413
                                                                                                                                                                                                                                                                                                                                                                                                 404
                                                                                                                                                                                                                                                                                                                                                                                                                                     353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         173
                      CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                 GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                         TGGAAAGTGGAAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                     TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                  TTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                   ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGAGTTATTG
                                                                                                                                                                                                                                                         ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                                                                                                     AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                               AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                            GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCTGGCTGCTCCAAAGCATCTTTTGTTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCAAATGTGAGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 3079;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                712
                                                                                                                652
                                                                                                                                                                                            592
                                                                         703
                                                                                                                                                       643
                                                                                                                                                                                                                                   583
                                                                                                                                                                                                                                                                          532
                                                                                                                                                                                                                                                                                                               523
                                                                                                                                                                                                                                                                                                                                                        472
                                                                                                                                                                                                                                                                                                                                                                                            463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       292
                                                                                                                                                                                                                                                                                                                                                                                                                                 412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                283
```

1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 1792 	1664 GCGTGCCCAGCGTGCCCAGCGTGCTGCTGCTGCTGGTAGAGGACAGCCCGCTGGTACAGG 1723 1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGCAGAGAGAAGAGCTCAAGCGTT 1732	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCA 1612	1404 ADANICABALIGGABLALICAGGCLAMAGABACILAMACILAMACIGGAGAGAGCCCCCAGGC 1543 1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTC 1552	373 CTACTATATCTCCAAACTTCAATTTCTGGGCCAACTCCTGGACTATGAGAGAAGATTA 14	TCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	GTGTTCTAGTGGACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 13	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252 1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1252 1104 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 1303	124 TGATIGCAGCAGAATGGGATTGGTTATGTIGTTAAATGCCAGGAATACCTGTCCAAAAGCCTG 133 ACTTTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATATGACAGCTTTTTGTGAGAAAA 1 134 ACTTTATCCCCGAGTCTTATTTTCCTGCGTGTGACTGTATTATTGACAGCCTTTTTTTT	064 CHACCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGGCTG 073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG	953 AATCCACTCTACTCCCTACCTGCATTTCTCAGCCTTGCCTTACCTCTTGCCAACATTGGGC 1012	3 ACCTGCTTGCAGGTGG	AGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAA	TIGATIGCAGICAGAAGGITGAGTITACAGAGCICATICAGCGAAACAIAAGGITGACA TIGATIGCAGICAGAAGGITGTAGTITACGATCAAAGCICCCAAGAIGITGCCICTCTCTCT TIGATIGCAGICAGAAGGITGTAGGITGACGATCAAAAGCICCCAAGAIGITGCCICTCTCTCT TIGATIGCAGICAGAAGGITGTAGGITGACGATCAAAAGCICCCAAGAIGGITGCCICTCTCTCTCTCTCTCTCTCTCTCTCTCTCTC	aacaggacaaagtgttaattacagagctcatccagcattcagcgaaacataaggttgaca
Qy 2813 TTGTTCTTAAAAAGCAAGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCAC 2872	CICTIAACAICIGGATITIGAGAGAICAGCIAATACTICICTCAACAAAAIGGAAGGGCA GATGCTAGAATCCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTC	2693 CTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTCAACAAAAATGGAAGGCCA	2573 TTTTCTTGTTCACAAAAAAATTCCCTGTAAATCTGAAATATATAT	Db 2504 AGAACAGGTCACGGGAAGAGATGAGTCGGCAGTCAGTCTAGCCTTTTCGGGCAGCA 2563 Oy 2513 TGGAAATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTT 2572	Qy 2393 TIGAAJAGCAGTITAAACGCAGAAGCTGCCAAJTTGGAGAGAGCATCATGTCAG 2452	2333 GGCGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCT	Qy 2273 ACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCA 2332	Qy 2213 TTGCCACAGAGTCCTCACACTTCTACTCTCTCAGCCATCTACGGAGGCAGTGCCAGTT 2272	Db 2144 TCGGCCTTTCCACCAGCCAGCACCTCACGAAGTCTGGCCTGGGCCTTAAGGGCT 2203 Qy 2153 GGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTGACCAGCAGCAGCAGCTAGTT 2212	2084 ITTTATCTCCACTGCATCGAAGTGGGAGGGCGTGGAGGACAATTACCACACCAGCTTCCTTT 2093 TCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCCTGGGCCTGAGGCCTTAAGGGCT	Qy 1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCGCCCCAGAGGTCCC 2032	3 GTCCTGATAAGGAGGCAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA	QY 1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCA 1912	Qy 1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 1852

```
RESULT 21
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                      3463
                                                                                                                                                                                                                                                                                                                                                                                                          3413
                                                                                                                                                                                                                                                                                                                                                                                                                               3403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3053
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2933
                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                               CTTCTCAGCTTTATGAAGAGAAAGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGGTTTGACCACTACCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAAACCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCCACGCTCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3474
                                                                                                                                                                                                                                                                                                                                                                                                     3472
                                                                                                                                                                                                                                                                                                                                                                                  3522
                                                                                                                                                                                                                                                                                                                                                                                                                                               3412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3352
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3222
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    3102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3052
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3042
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2982
               δ
                                    밁
                                                   Ş
                                                                           망
                                                                                            δ
                                                                                                                      밁
                                                                                                                                      S
                                                                                                                                                                밁
                                                                                                                                                                                 δ
                                                                                                                                                                                                         밁
                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                B
                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; NAME/KEY: CDS
; LOCATION: (589)...
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/862,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR FILING DATE: 2000-05-19
PRIOR FILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed - 1
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local S
Matches 3299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: Fast; SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
nes 3299; Conserv
                                    824
                                                       773
                                                                             764
                                                                                                 713
                                                                                                                      704
                                                                                                                                           653
                                                                                                                                                                644
                                                                                                                                                                                      593
                                                                                                                                                                                                         584
                                                                                                                                                                                                                              533
                                                                                                                                                                                                                                                   524
                                                                                                                                                                                                                                                                        473
                                                                                                                                                                                                                                                                                            464
                                                                                                                                                                                                                                                                                                                 413
                                                                                                                                                                                                                                                                                                                                       404
                                                                                                                                                                                                                                                                                                                                                          353
                                                                                                                                                                                                                                                                                                                                                                               344
                                                                                                                                                                                                                                                                                                                                                                                                                          284
                                                                                                                                                                                                                                                                                                                                                                                                                                              233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       173
CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC
                                             AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                                CATCCCACATITTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                          TGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FastSEQ for Windows Version
                                                                          AACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACA
                                                                                                                     CATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGC
                                                                                                                                                                                                      TGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                       TTGTCATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGC
                                                                                                                                                                                                                                                ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTG
                                                                                                                                                                                                                                                             ACACCACCATTACATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGCACTTATTG
                                                                                                                                                                                                                                                                                                                                               GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTTAACTCTCCTTTTGCC
                                                                                                                                                             TGGAAAGTGGAAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATA
                                                                                                                                                                                                                                                                                                        AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTTGAGC
                                                                                                                                                                                                                                                                                                                                                                                         ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                      CGCTGGCTGCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                  CGCTGGCTGCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GCTTTCAGTCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGATG
                                                                                                                                                                                                                                                                                          AGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAGC
                                                                                                                                                                                                                                                                                                                                    GAGAAAGAGACATTCACTTGGAGGGCTCTTGCTGAAAATGGGTTTAACTCTCCTTTTGCC
                                                                                                                                                                                                                                                                                                                                                                             ATCAAATGTGAGGGGCTGCTTTGTGGACGGAGTCCTTTGCAAGAGCACATCAACGGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (2586)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   56.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 3079;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DВ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3544;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
             892
                                 883
                                                     832
                                                                                              772
                                                                                                                                                                                  652
                                                                                                                                                                                                                            592
```

823

763 712 703 643

532 583

523 472 463 403

412

343

292 283

2993 TAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCACC 3052	72 Qy Db	13 GTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACA 1 	B 8
	12 Pb	1853 CCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCA 19 	용 성
	03 52	1793 GCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGA 18 	B 8
2813 TIGITCITAAAAAGCAAGIGICTITGGIGITGGAGACAAAAICCCCTACCAITITCAC 2813 TIGITCITAAAAAAGCAAGTGICTITGGIGTTGGAGGACAAAAICCCCTACCAITTTCAC 2863 TIGITCITAAAAAAGCAAGTGICTTTGGIGTTGGAGGACAAAATCCCCTACCAITTTCAC	792 Db	1733 CCTTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATG 17	당 <i>원</i>
	32 Db	1673 CGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTT 17	용 <i>칭</i>
	72	1613 GCGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGG 16	유 왕
	12	1553 CACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCA 16	유 왕
	03	1493 CAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTC 15	용 <i>정</i>
	92	1433 AGAACCAGACTGGAGGATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCTGCACCTGGAGAAGC 14	පි රි
	432 Db 483	1373 CTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTA 14	B &
	72	0-0	B 8
	12	1253 GTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACA 13	유 왕
	52	1193 TTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGAT 12	유 성
	92	1133 ACTITATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAA 11	용 성
	83 32	1073 TGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTG 11 	용 성
	72	1013 CAACCCGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGC 10	음 <i>청</i>
	63 12	953 AATCCACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGC 10	음 성
2024 GCCAGAGCGAGTGCAATTCGGTCAGAACCAGCAGCAGCAGTGGCACCGCCCAGAGGTCCC	03	893 ACCTGCTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAA 95	음 ઇ
1973 GCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCC		84 CTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTC 9	망

	Qy 72 GCGGCGCCTCGCAAGTCCCGGGAGGGGAGGGGGGGGGGG	AGCGACGGGACGGGACGCGAGCGGGAGCGCAGCCCTCTCGGCTCCGCG 71	Query Match 56.3%; Score 3069; DB 18; Length 3521; Best Local Similarity 99.9%; Pred. No. 0; Matches 3459; Conservative 0; Mismatches 3; Indels 2; Gaps 2;	; LENGIH: 3521 ; TYPE: DNA ; ORGANISM: Homo sapien US-10-370-715B-261	CURRENT APPLICATION NUMBER: US/10/370,715B CURRENT FILING DATE: 2003-02-21 NUMBER OF SEQ ID NOS: 742 SEQ ID NO 261	; APPLICANT: W1,THOMAS D. ; TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune ; TITLE OF INVENTION: Related Diseases ; FILE REFERENCE: P1948R1-US	; APPLICANT: JACKMAN, JANET ; APPLICANT: SCHOENFELD, JILL R. ; APPLICANT: WILLIAMS, P. MICKEY ; APPLICANT: WOOD, WILLIAM I.	Patin Dock APPLICANT: B APPLICANT: APPLICANT:	-10-370-715B-261 Sequence 261, Appublication No. Publication No.	RESULT 22	3473 AA 3474	QY 3413 AATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	QY 3353 TGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTC			3233 CCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	Qy 3173 ATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGGT	QY 3113 TCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCAT 3172	3053 3103
	dg Ø	D Q	D Qy	עס	Qy Db	QV dd	Qy dd	Qy Db	Qy db	dg VQ	dd 40	4d	d b	Oy Db	. Q	da da	9d 9d	۵ B	Оу
1212 ATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTTGTTCTAGTGCACTGTTT 1271 	1152 TITCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTGGTTGGACAA 1211	1092 TGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCA 1151	1032 TCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCAGAATGGGAT 1091	972 CTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGAATTCTTCCCAA 1031 	912 TGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCTAGTCCCTAC 971 	852 TGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCAGGTGGGTT 911	792 TGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	732 TACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	672 CATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAAT 731 	612 AGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACATTTTGGAAGC 671	578 GATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGGAACGGAAAA 637	518 GTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGCCCATGAGAT	458 492	398 432		318 TTTGTGGACGGAGTCCTTTGCAAGAGCACTCAACGGGAAAGAGAAGAGACATTCACTT 397	278 TCTTTTGTGGAATGGTTATTCCAGTCATCTTTATGAATCAAATGTGAGGGGCTGC	218 252	158 CGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAGTCCAGTGTAAA 217 192 GCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGCTGCTCCAAAGGA 251

Ş	\$ 5	<u> </u>	B 8	B 8	99 Q	B &	B &	B 8	ያ <i>δ</i>	B &	용 성	<u> </u>	B &	유 성	용 성	B 8	유 성	Q dd
O CHARLAGE TACETHE TACAMAN CHARATETTATTETTATACACHARANACHARANACHARA		2232 CTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAG 2291	2172 CCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACA 2231	2112 GCAGCACCTCACGAAGTCTGCCTGGGCCTTGAGGGCTGGCACTCGGATATCTTGGC 2171	2052 AAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTTCCACCAGCCA 2111	2 TTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCG 2	1932 CAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCA 1991 	1872 CTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCTGATAAGGAGGAAGC 1931 	1812 TGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTT 1871 	1752 ATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGA 1811 	1692 GTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTGGATATCAA 1751 	1632 CGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCT 1691	GAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCCAG 1	1512 TGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCCTGTGCCGACTCTGC 1571	1452 AGGGCCAAAGAGCACAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGC 1511	392 CAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAACCAGACTGGAGCATC 1	2 GTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTT 1 	1272 AGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATGAAGAGGATGGACAT 1331
8	д , С	D &	Q B \$	}	\$ B &	p Q	₽ \$	P \$	}	do do	p	S B 8	g Q	рb	₽ .Q) B &	D Qy	VQ VQ
3431 AATGGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTCAA 3474	3371 AGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAGAATTGTTTAA 3430	AGANGGARAT 1912 AGANG AGANG CACCAGAGA COGAGAGA CACCAGATTA AGAAAGAAACAAACAACAACAACAACAACAACAACAACAA	3211 BABAGGGABACTTTTTAGATTTTAGATTAGATTATTTTTTTTTT	TAGGCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATTAGGCATAGACAAACTGTCTATTAGGCAATTCAAACTGTCTATTAGGCAAAACTGTCAAACTGTCTAATAGGCAAAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTCAAAACTGTAAAACTGTAAAACTGTAAAACTGAAAAAAAA		AGCATCACTCTGCTGGACGACCATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACC 	3011 AARTGATICCTATICCAAAGCTGATTCACAAACCCACGCTCACCTGACAGCCGAGGGACACG 3070	AGCTTGGGGGTCAGGTAGGTAGACCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAG	CTCARATATTAGTCTTTGTCCGGACCCTTCCATAGTACACCTTAGCGCTGAGACTGAGCC	GTGTCTTTGGTGTTGGAGGACAAAATCCCCTACCATTTTCACCTTGTGCTACTAAGAGAT 	AGACGGAGGAAAACCATITTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAA 	GAGAGATCAGCTAATACTTCTCTCAACAAAATGGAAGGCAGATGCTAGAATCCCCCCCT	TATGGTGTAAAAGCAACAGGTGGATCAACCCAGTT-GTTACTCTCTTAACATCTGCATTT	2592 ATTCCCTGTAAATCTGAAATATATATATGTACATACATATATAT	CTGAGAAGAAGACACTTGIGACTICTATAGACAATTTTTTTTTT		2412 CAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGA 2471 	2352 CAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACG 2411

Db	8	B &	B &	B 8	B 8	Db Qy	B &	B &	B 8	B 8	g q	Query Ma Best Loo Matches	S-10-	ø	S NUM		E E	Db
601 CCAACCCGAATCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG 660	TCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAG	952 AAATCCACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGG 1011 	892 CACCIGCTIGCAGGIGGGITTGCIGAGTICTCTCGTTGTTTCCCTGGCCTCTGTGAAGGA 951	832 TCTTCAGACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGA	772 ATTGATTGCAGTCAGAAGGTTGTAGTTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTC 831	712 CAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGAC 771 	652 ACATCCCACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTG 711	592 CTGGAAAGTGGAAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAAT 651 	532 GTTGTCATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTG 591	472 CACACCACTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATT 531 	412 CAGTCACCACCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTGAG 471	/ Match 52.1%; Score 2837; DB 17; Length 3059; Local Similarity 99.9%; Pred. No. 0; nes 3057; Conservative 0; Mismatches 2; Indels 1; Gaps 1;	**EATURE: **MAME/KEY: CDS **LOCATION: (127)(2121) **LO-257-026-1	LENGTH: 3059 TYPE: DNA ORGANISM: Homo sapiens	CORKENI AFFLICATION NUMBER: US/10/257,026 CURRENT FILING DATE: 2003-11-07 NUMBER OF SEQ ID NOS: 3 SOTTWARE: Patentin Ver. 2.1	APPLICANT: Merck Patent GmbH TITLE OF INVENTION: New dual specificity phosphatase FILE REFERENCE: DUSPIOKOWS	WS-10-257-026-1 VS-10-257-026-1 ; Sequence 1, Application US/10257026 ; Publication No. US20040086859A1	
Qy VS	. ઇ	Db Qy	D 5	o dd Qy	Db Qy	Å Ö	Db Qy	р В Q	da VQ	D Qy	φ 29	B &	QY dt	ρ Q	QY db	β δ	Qy db	Оу
1681 TTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTTGGCCTGGGCCTTAAGGGC 1740 2152 TGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTAT 2211	2092 TICGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGGCCTTAAGGGC 2151	2032 CTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTT 2091	1 6	1 2	₩ N	1792 GGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGG 1851 	21	1672 GCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCCAATAAGCTCAAGCGT 1731 	12 01	52 41	1492 1081	1432 1021	1372 961	1312 ATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1252 841	1192 781	1132 721	/ 1072 CTGATACAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCT 1131

1002	3232 ACCAAFTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGGATAATTTTTTTT	ð
Qy 942 CTGTGAAGGAAAAATCCACTCTAGTCCCTACCTGCATTCTCAGCCTTGCCTTACCTGTTGC	11/2 TATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	B 8
882 367	12 GTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCA 3	. B &
822 307	3052 CTGACAGCCGAGGGACACGAGCATCACTCTGCTGGACGGAC	음 ઇ
	2992 CTAGTGGTAAATCCAAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCAC 3051	음 <i>성</i>
702	32 TTA 20 TTA	B 8
	2872 CGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACC 2931	음 ઇ
582 GGTGGCTCTGGAAAGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCCGGCCA	2812 CTTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTTGGAGGACAAAATCCCCTACCATTTTCA 2871	B 5
uery Mai	2752 AGATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCT 2811	음 ઇ
NAME/K LOCATI OTHER OS-10-296-	2692 TCTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCCAACAAAAATGGAAGGGC 2751 	음 ઇ
LENG TYPE ORGA	2632 ATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTAC 2691	<u> </u>
PRIOR APPLICATION NUMBER: US09/552,317 PRIOR FILING DATE: 2000-04-25 NUMBER OF SEQ ID NOS: 1478 SEC ID NO 520	2572 TTTTTCTTGTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	B 8
CURRENT APPLICATION NUMBER: US/10/296,115 ; CURRENT FILING DATE: 2002-11-18 ; PRIOR APPLICATION NUMBER: US/9/488,725 ; PRIOR TILING DATE: 2000-01-21	2512 ATGGAAATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTT 2571	음 6
ao y c	2452 GAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	8 8
RESULT 24 US-10-296-115-520 IS-20-296-115-520 Sequence 520, Application US/10296115	2392 TTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCA 2451 	음 ઇ
Db 3000 AAATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	2332 AGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCC 2391	문 <i>원</i>
2940	2272 TACTCTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGC 2331	B 성
2880	2212 TTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGT 2271	B 8
Db 2820 ACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT		닭

Q	D Qy	문왕	B &	B &	Db Qy	g Q	유 성	B &	P	B &	B 8	B 8	D Q	B 8	D Q	g Q	문상	DЬ
2082 CAGCTTCCTTTTCCGCCTTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGG 2141	2022 CCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACAC 2081	1962 GCCTTCAGACAGCCAGAGCAACCGATTGCAGTCAGAACCAGCAGCAGCAGTGGCACCGC 2021	1902 TCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAG 1961 	1842 TCTGGATGGGACCAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGAC 1901 	1782 ATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTAC 1841 	1722 GCTCAAGCGTTCCTCTCTCTGGATATCAAATCAGTTTCATATTCAGGCAGCCAGC	1662 GCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAA 1721 	1602 GCATCCCGCCAGCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCC 1661	1542 GCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGT 1601 	1482 CCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAC 1541 	1422 GAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCA 1481 	1362 AGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGA 1421 	1302 TATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAA 1361 	1242 CTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGC 1301	1182 TIGTGAGAAAATTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGC 1241 	1122 TCCAAAGCCTGACTITATCCCCGAGTCTCATTTCCTGCGTGTGTGCCTGTGAATGACAGCTT 1181	1062 CAACAAGGAGCTGATACAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCTATACCTG 1121	
										·				<u>-</u>			-	
g Q	Db Qy	D Q	D Q	g VQ	Db Qy	Db dd	Db Qy	Db Qy	Db Qy) D Q	d dd y	dd dd	d da y	8 8	?) p 5	}	g g
3162 ACCACTACCATATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	102 586	042 526	982 466	922 406	862 346	802	2742 ATGGAAGGCAGATGCTAGAATCCCCCCTAGACGGAAGACCATTTTATTCAGTGAAT 2801 	2682 CARTTGTTACTCTTTACATCTGCATTTGAGAGATCAGCTAATACTTCTCCAACAAAA 2741	2622 ACATACATATATATTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACC 2681	2562 GACAATTTTTTTTTTTCTTCTTCACAAAAAATTCCCTGTAAATCTGAAATATATAT	2502 TTCGGCACCATGGAAATCATTGAGGTCTCCTGAGAAGAAGAAGACTTGTGACTTCTATA 2561 	2442 CATCATGTCAGAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGT	2382 AGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAACCTGCCAAATGGAATTTGGAGAGAG 2441	1807 TTCTGTGCGCAGGCGGAGAAGCCAAGTGACAGAGCTGACTGCGGCGGAGCTGGCATGA 2381			142 CUTTAAGSGUTGGCACTCGGATATCTTGGCCCCCAGACCTTACCCTTACCCTGACCAG	CAGCTTCCTTTTCGGCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGG

361	301 TGAGGGGCTGCTTTGTGACGGAGTCCTTTGCAAGAGCACATCA 	Qy 241 GCTCCAAAGCATCTTTTGTTGTGGAATGGTTATTCCAGTCATCTCTTTATGAATCAAATG	Oy 181 TCCAGTGTAAAGCTGTTGGAGCGCGGGAGCAAAGGTAAAGAATGATGTAATGCGCTGGCT	Qy 121 GTGACAACTTTCGTTTCCCTCTGAGGGAATTGGGAGGTCGGCGGCCCCAAAAGCTTTCAG	Qy 61 TCGGCTCCGCGGCGGCGCCTCGCAAGTCCGGGAGGGGGGGG	GAGCGACGGGACGGACG	Query Match 45.1%; Score 2459; DB 17; Length Best Local Similarity 99.9%; Pred. No. 0; Matches 2729; Conservative 0; Mismatches 3; Indels	LENGTH: TYPE: DN ORGANISM 10-168-50	PRIOR FILING DATE: 2000-12-21 ; NUMBER OF SEQ ID NOS: 76 ; SOPTWARE: Patentin Ver. 2.1 ; SEO ID NO 2		2	APPLICANT: PLOMMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: MHYTE, DAVID APPLICANT: MHYTE, DAVID	2 to t	Db 2886 CCCCTTTGTAAATCAAAGAATTGTTT 2912	Db 2826.CACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGA Qy 3402 CCCTCTTTGTAAATCAAAGAATTGTTT 3428	3342 CACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTT	2766 AATTTTTTTTTTCTCAGCTTTATGAAGAGAAGGGAAACTGTC	Db 2706 CACTTTTCAGACCAAATTCAAACTGTCTATGCACAAAAATTCCCGTGGGGC	Qy 3222 CACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGAT
4 6		CTTTATGAATCAAATG 300	240	180	120	60	h 2732; Oy s 1; Gaps 1; Db	Qy Db	Qy Db	Qy Db	Qy dd	Qy	Qy Db	Qy	TAACGAGTCTACCT 2885 Qy	3401	2825	GCCTAGATGGAGAT 2765 GGATTCAGCTGAAC 3341	GCCTAGATGGAGAT 3281 Db
1441 ACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAA 1500	1381 TCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAG 1440	1321 AGGATGGACATGTCTTTAGATGGAGCTTACAGATTTGTGAAAGAAA	61 GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTACTGCCTACATCATGAAG 61 GTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTACATCATCATGAAG	OI TGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTTCTA OI TGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTA OI TGGTTGGACAAATCAGTAGATTTCATTTGAGAAAGCAAAAGCCTCCAATGGATGTGTTCTA	41 CCCGACTCTCATTTCCTGCGTGTGCCTGTGAATGACACCTTTTGTGAGAAAATTTTGCCG	1081 CAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATC 1140	1021 ATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAG 1080	961 CTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCGA 1020	901 GCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACT 960 	841 TGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTT 900	781 AGTCAGAAGGITGTAGITTACGATCAAAGCTCCCAAGAIGTTGCCTCTCTCTCTCCAGAC 840	721 AAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGATTG	661 ATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGAC 720	601 GGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCAC 660 	541 GCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGT 600		ATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATG	421 CCAGCCTGACCTCATACACTTTTAGTACAATGGAGTGGCTGAGCCTTTTGAGCACACCACC 480	

성 유

밁

Db Qy	2521 ATIGAGGICTCCTGAGAAGAAGACACTTGTGACTTCTATAGACAATTTTTTTT
D CY	2461 TCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAAATC 2520
) b QY	2401 CAGTITAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGG 2460
) D Q	2341 AAGCCAAGTGACAGAGCTGACTCGCGGGGGGGGGTGGCATGAAGAGCCCCCTTTGAAAAG 2400
) b 02	2281 TACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAG 2340
, p. 15	2221 GAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCC 2280
o da Qy	2161 GATATCTTGGCCCCCAGACCTCTACCCCTTACCAGCAGCAGCAGCTAGTATTTTGCCACA 2220
da Qy	2101 TCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCG 2160
D 64	2041 CCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTTCGGCCTT 2100
M B Q	1981 AAGCGATTGCATTCGGTCAGAACCAGCAGCAGGGGCACCGCCCAGAGGTCCCTTTTATCT 2040
/; // US-(1921 AAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGGCCTTCAGACAGCCAGAGC 1980
Sign	1861 CTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGAT 1920
	1801 TCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTAGTCTGGATGGGACCAAG 1860
Ω.	1741 CIGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCC 1800
RESI US-	1681 GGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCT 1740
Db Qy	1621 AGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCGCCTGGTACAGGCGCTCAGT 1680
) Db Qy	1561 GCCGACTCTGCTACCTCAGAGGCAGGAGGAGGAGGCCGTGCATCCCGGCGAGCGTGCCC 1620
) p 4	1501 CCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGT 1560
<u> </u>	441

음 성

밁 δ ₽ Ś 밁 δ 밁 Ś 밁 δ 뭥 S 문 Ś 밁 Ś 밁 Ś

```
Sequence 20, Application US/09964277

Patent No. US20020137170A1

GENERAL INFORMATION:

APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125.434

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT ETLING DATE: 2001-09-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 20

SEQ ID NO 30

SEQ ID NO 30

SEQ ID NO 30

SEQ ID NO 30

SEQ ID NO 33332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Juery Match
Best Local Similarity 99.9%;
Matches 2357; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SULT 26
-09-964-277-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 3332
TYPE: DNA
ORGANISM: Homo sapiens
-09-964-277-20
   1455
                                                                                                                               1335
                                                                                                                                                                1475
                                                                                                                                                                                                1275
                                                                                                                                                                                                                                1415
                                                                                                                                                                                                                                                                 1215
                                                                                                                                                                                                                                                                                              1355
                                                                                                                                                                                                                                                                                                                              1155
                                                                                                                                                                                                                                                                                                                                                                                               1095
                                                                                                                                                                                                                                                                                                                                                                                                                            1235
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1035
                                                                                                                                                                                                                                                                                                                                                              1295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1115 ATACCTGTCCAAAGCCTGACTTTATCCCCGAGTCTCATTTCCTGCGTGTGTGCCTGTGAATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2581
                  GGCCCGTGCATCCCCGCCAGCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGG 1654
                                                           GCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAA 1594
GGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCAGCCGTCCAGCCGTTAGAGG
                                                                                                                                                                                                               ACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGC
                                                                                                                            TGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAA
                                                                                                                                               TGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTTCTCAGAGGGTTGGACAGAAAA 1534
                                                                                                                                                                                             TTGTGAAAGAAAAAAACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                                                                TTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGG
                                                                                                                                                                                                                                                                                                                                            CCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                                          CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                            CAAAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCATCGCTATCGCCTACATCATGAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCTGCATTTGAGAGATCAGCTAATACTTCTCT 2733
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTCTTAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GAAAATGGAGCTATGGTGAAAAGCAACAGGTGGATCAACCCAGTTGTTACTCTCTTAAC 2699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; Score 2117; DB; Pred. No. 0; 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 3332;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
1514
                                                                                                                              1394
                                                                                                                                                                                           1334
                                                                                                                                                                                                                           1474
                                                                                                                                                                                                                                                            1274
                                                                                                                                                                                                                                                                                          1414
                                                                                                                                                                                                                                                                                                                           1214
                                                                                                                                                                                                                                                                                                                                                         1354
                                                                                                                                                                                                                                                                                                                                                                                          1154
                                                                                                                                                                                                                                                                                                                                                                                                                        1294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1234
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1094
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1034
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2640
```

음 &

유

Query Match	2735 AACAAAAATGGAAGGGCAGATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTC 2794
; TYPE: DNA ; ORGANISM: US-10-104-047	2675 ATCAACCCAGTTGTTACTCTCTTAACATCTGCATTTGAGAGATCAGCTAATACTTCTCTC 2734
NUMBER OF SOFTWARE: SEQ ID NO 1	2615 TATATGTACATACATATATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGG 2674
; CURRENT AP ; CURRENT FI ; PRIOR APPL ; PRIOR FILI	2555 TTCTATAGACAATTTTTTTTTTCTTGACAAAAAAATTCCCTGTAAATCTGAAATATA 2614 2415 TTCTATAGACAA-TTTTTTTTTCTTGACAAAAAAAATTCCCTGTAAATCTGAAATATA 2473
GENERAL INF APPLICANT: TITLE OF I	2495 CTAGCTTTTCGGGCAGCATGGAAATCATTGAGGTCTCCTGAGAAGAAAGA
RESULT 27 US-10-104-047 ; Sequence 17 : publication	2435 GAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAAGAGCTGGGGAAAGTGGGCAGTCAGT
331	2375 GGCATGAAGAGACCCCTTTGAAAAGCAGTTTAAAACGCAGAAGCTGCCAAATGGAATTTG 2434
Db 3254	2315 AAGTCTATTCTGTGCGCAGGCGGCAGAGCCAAGTGACAGAGCTGACTGCCGGCGGAGCT 2374
Db 3194 Qy 3394	S ACGGAGGCAGTGCCAGTTACTCTGCCTACAGCTGCAGCCAGC
w	ACGGAGGCAGTTGCCAGTTACTCTGCCTACAGCTGCAGCCAGC
ωι	2195 TGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCT 2254
Db 3074	2135 GCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCC 2194
Db 3014 Qy 3214	
Qy 3154	1875 GCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATT 1934
309	2015 GCACCGCCCAGAGGTCCCTTTTATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATT 2074
. N	1955 CCGCCAGGCCTTCAGACAGCCAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTG 2014
Db 2834	1835 AGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGA 1854
Db 2774 Qy 2974	95 CCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGG
Оу 2914	1835 CCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGG 1894
Db 2714	5 TGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTT 1
1 N	1715 GCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGC
Qy 2795	ACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACA
	1655 ACAGOCCGGTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACA 1714

```
~
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ភ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ž
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94
TAAAGATGAACTTGGTTTC 3472
                                                ATTAGGGGCCTTGCCAAGGTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCG
                                                                                                                  AGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGA
                                                                                                                                                                   ATGGAGATAATTTTTTTTTTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTC
                                                                                                                                                                                                                     GCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGGTGGGCCTAG
                                                                                                                                                                                                                                                       CCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                               CCCTGTTAGGGACAGAGCCTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCTACCATTTT-CACGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTGTTGGAGGACAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGA
                                                                                                                                                      ATGGAGATAATTTTTTTTTTCTTCTCAGCTTTATGAAGAGAAGGGGAAACTGTCTAGGATTC
                                                                                                                                                                                                        GCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAG
                                                                                                                                                                                                                                                                                                                                                           AGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAA
                                                    3313
                                                                            3453
                                                                                                                            3393
                                                                                                                                                                               3333
                                                                                                                                                                                                                                                       3073
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2973
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2713
                                                                                                   3253
                                                                                                                                                      3193
                                                                                                                                                                                                       3133
                                                                                                                                                                                                                               3273
                                                                                                                                                                                                                                                                                3213
                                                                                                                                                                                                                                                                                                         3013
                                                                                                                                                                                                                                                                                                                                 3153
                                                                                                                                                                                                                                                                                                                                                           2953
                                                                                                                                                                                                                                                                                                                                                                                   3093
                                                                                                                                                                                                                                                                                                                                                                                                                                     3033
                                                                                                                                                                                                                                                                                                                                                                                                                                                              2833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2773
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2913
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2854
                                                                                                                                                                                                                                                                                                                                                                                                            2893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2653
```

```
Sequence 1750, Application US/10104047

Publication No. US20030236392A1

GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20030236392A1e1 full length cDNA
FILE REFERENCE: H1-A0105
CURRENT APPLICATION NUMBER: US/10/104,047
CURRENT FILING DATE: 2002-03-25
PRIOR APPLICATION NUMBER:
PRIOR FILING DATE:
NUMBER OF SEQ ID NOS: 4096
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 1750
LENGTH: 2558
TYPE: DNA
ORGANIEM: Homo mapiens
US-10-104-047-1750
```

38.5%;

Score 2098;

DB 17;

Length 2558;

밁 ક 문 ঠ 문 \$ 문 ક 문 δ 밁 ક 밁 ঠ 용 ঠ 밁 S 밁 र् 밁 ঠ 맑 ð 문 S 문 ঠ 밁 δ 밁 ફ

Q	ОУ	Db Qy	Qy Db	Qy dd	Db Qy	g Qy	49 49	D Qy	d Qy	Qy dd	Qy Db	Qγ	D Qy	p 4	S B &	gb Qy	Db Qy	Bes: Mat
3592 TAATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAA 3651	3532 CCAAAGCAGATGTTTTTGCCCTTTCTGCTTCACTGCATGGATACAGTTGGTAAAATGTAA 3591	3472 CAAGCCAAATGTGAATTTATTTGGGTTGGTAGCAGAGCAGCAGCACCTTCAAATTCTCAG 3531	3412 AAATCAAAGAATTGTTTAAAATGGGATTGTCAATCCTTTAAATAAA	3352 CTGGCAACATCACGATTTAAGCTAAGGTTGGGAGGCTAACGAGTCTACCTCCTCTTTGT 3411	3292 TCTTCTCAGCTTTATGAAGAGAAGGGAAACTGTCTAGGATTCAGCTGAACCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAGCAG	3232 ACCAATTCAAACTGTCTATGCACAAAATTCCCGTGGGCCTAGATGGAGATAATTTTTTTT	3172 TATCTGGTAGCCCATTTTCTAGGCATTGTGAATAGGTAGG	3112 GTCTACCTTAGAGCAAACCCAGTACCTCAGACAGGAAAGTCGGGGCTTTGACCACTACCA 3171 	3052 CTGACAGCCGAGGACACGAGCATCACTCTGCTGGACGGAC	2992 CTAGTGGTAAATCCAAGAGAAATGATCCTATCCAAAGCTGATTCACAAACCCACGCTCAC 3051 	2932 TTAGCGCTGAGACTGAGCCAGCTTGGGGGTCAGGTAGGCACCCTGTTAGGGACAGAGC 2991	2872 CGTTGTGCTACTAAGAGATCTCAAATATTAGTCTTTGTCCGGACCCTTCCATAGTACACC 2931	2812 CTIGTTCTTAAAAAAGCAAGTGTCTTTGGTGTTGGAGGACAAAATCCCCCTACCATTTTCA 2871 	181 AGATGCTAGAATCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCT 2811 AGATGCTAGAATCCCCCCTAGACGGAGGAAAACCATTTTATTCAGTGAATTACACATCCT 240	692	2632 ATATTTTTGGAAAATGGAGCTATGGTGTAAAAGCAACAGGTGGATCAACCCAGTTGTTAC 2691	72 1	al 6 2398
								<u> </u>										
B 8	Db Qy	당 성	g Qy	др. QV	р V	B 5	94 154	D QY	D Q	D Qy	d dq	B 8	용 성	Db	& B &	? B &	? B &	€ ₽
4672 TTAGGGCTTCTCTTGGCCATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTA 4731			4492 CATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACACAC		4372 TGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGG 4431	4312 ACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATG 4371	4352 GACTTCATGTTTCCTATGCTGACTCTAAAACCAGCACAGAATGATATGACTCAACACAG 4311					3952 GCGTCCTCAGTCCTCAACCTACAATCACTGTATGGAATCGGTCCTGGCAGCTGAACATAG 4011	3892 AACGCTGGCCGGCGTGTCTTCAGTGGAAAAAGCAAATCAAAATGGAGCGAGAGCAAAGGG 3951 		1940ASANSOLITAS VANOSARIATICAGAATAAAGCGTTGAGAAGGTGAGAAG 3831 		ANG IA-MAN I SE I SASSANGKANGKANGKANGKANGKANGKANGKANGKANGKANGK	TAATATGGCAGAATTTTATAGGAAACTTCCTAGGGAGGTAAATTATGGGAAGATTAAGAA

		Qy 598 AGTGGAACAGAAAAAGTGCTGCTTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 657	Query Match 34.8%; Score 1896; DB 9; Length 1998; Best Local Similarity 99.9%; Pred. No. 0; Matches 1996; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Matches 1996; Conservative 0; Mismatches 2; Indels 0; Gaps 0; Oy 538 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 597	; PRIOR FILING DATE: 2000-03-24 ; NUMBER OF SEQ ID NOS: 10 ; SOFTMARE: FastSEQ for Windows Version 4.0 ; SEQ ID NO 3 ; LENGTH: 1998 ; TYPE: DNA ; ORGANISM: Homo sapiens US-09-816-494-3	GENERAL INFORMATION: APPLICANT: Meyers, Rachel A. TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002 CURRENT APPLICATION NUMBER: US/09/816,494 CURRENT FILING DATE: 2001-03-23 PRIOR APPLICATION NUMBER: US 60/191,858	Db 2401 GGAC 2404 RESULT 28 US-09-816-494-3 US-09-816-494-3 Sequence 3, Application US/09816494 Setort No US2002001880781		4852 2281 4912	Qy 4792 GGCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTAGGTGGGGTG 4851	QY 4732 CAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGT 4791
0y 0y 0b	Q b Q	\$ 42 A	2 D Q D Q	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	D Q D Q	ט אָט אָט	\$ \$ \$	B & 8	g & .	D Qy
1918 GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1977	1798 TCCTCATCAGAAGATGCTTTGGAATACTACCACTACTCCACTACTCGATGGATG	AGTGGGCTGCACCTGTCCGCAGACAGCCTGGAAGACAGCATAAGCTCAAGCGTTCCTTC	TOTAL CONTROL OF THE CONTROL OF THE PROPERTY O	1438 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497	1318 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA		1138 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1197	78	18 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA	361 CTTGCAGGTGGGTTTGCTGAGTTCTCCTCGTTGTTTCCCTGGCCTCTGGAAAGAAA

Gaps

0,

120 657 60

```
APPLICANT: Chun, MIYOUNG
APPLICANT: TSAI, FONG-YING
TITLE OF INVENTION: NOVEL 25869, 25934, 2638;
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
CURRENT APPLICATION UNUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/895,860
PRIOR FILLING DATE: 2000-06-29
PRIOR PRILING DATE: 2000-06-29
PRIOR PPLICATION NUMBER: US 09/723,806
PRIOR PPLICATION NUMBER: US 09/723,806
PRIOR PPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR PRILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 29
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 27, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1501
                                                                                                                                                                                                                                                                                                                                                                                                                         Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCATTGAGGTCTCCTGA 2535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAACATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGACCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rcegararerregecececagacereracecerrecergaceageageragrarrregee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ctricca cca gcca gca gca ccica cga a greige crigge crigge cria ge gca c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATCATTGAGGTCTCCTGA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 rcrccacrgcarcgaagrggaggaggacaarraccacagcrrccrrrrcggc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Curtis, Rory A.J.
Logan, Thomas Joseph
S
                                                                                                                                                                                                                                                                                                                                                    26335, 50365, 21117,
6, 16839, 49937, 49931
                                                                                                                                                                                                                                                                                                                                                    AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; ORGANISM: Homo Sapiens
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                           Ş
                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ; PRIOR FILING DATE: 2000-05-19
; PRIOR APPLICATION NUMBER: US 09/816,494
; PRIOR FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 09/815,419
; PRIOR FILING DATE: 2001-03-22
; Remaining Prior Application data removed -
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: FRETSEQ for Windows Version 4.0
; SEQ ID NO 27
; LENGTH: 1998
; TYPE: DNA
                                                                                  밁
                                                                                                                                                         밁
                                                                                                                                                                                     5
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
Matches 1996; Conserv
                                                                                                                      1198
                                                                                                                                                                                               1138
                                                                                                                                                                                                                                                                          1078
                                                                                                                                                                                                                                                                                                                                                1018
                                                                                                                                                         601
         721
                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                         958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    н
                             CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                          CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 1077
                                                                                                                                                                                                                                                                                                                                                                                                          ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FastSEQ for Windows Version 4.0
     CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                         CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                    ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATGGCCCATGAGATGGTAGCTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           34.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score 1896;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ì
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
```

1317

1257

720

660

1197

1137

540

600

1017

480

420

957 360 897

300

457	AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC 2	2398
860	CAGAAGCCAAGTGACAGAGCTGACTGGCGGGGGAGCTGGCATGAAGAGAGGCCCCTTTGAA 2	1801
	GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG	27
740	ACAGAGTCCTCACACTTCTACTCTGCCT	2218 1681
.680	TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC 2	2158 1621
.620	CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC 2	2098 1561
.560	TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 2	2038 1501
500	AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 2	1978 1441
.977 .440	GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG 1	1918 1381
.917 .380	AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT 1	1858 1321
.857 .320	TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC 1	1798 1261
.797	TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1	1738 1201
.737	AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1	1678 1141
.677 .140	CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1	1618
.080	TGTGCCGACTCTGCTACCTCAGAGGCAGGAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1	1558 1021
.557	GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1	1498 961
.497)60	CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1	1438 901
1437	ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1	1378 841
L377 340	AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1318 781

음 &

음 성 밁 ঠ 밁 ঠ 밁 ঠ 밁 ঠ 밁 გ 밁 ঠ 밁 ঠ 밁 ঠ 밁 ঠ 문 ঠ 뭐 ঠ 吊 ঠ 밁 र् 밁 S 몆 ð 밁

```
Remaining Prior Application data removed - Sel NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo Sapiens
FEATURE:
NAME/KEY: CDS
LCCATION: (1) ... (1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Chun, Miyoung
APPLICANT: T8a1, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILLE REFERENCE: MPIO3-01800NIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILLING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILLING DATE: 2001-06-29
PRIOR FILLING DATE: 2001-06-29
PRIOR FILLING DATE: 2000-05-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILLING DATE: 2000-011-28
PRIOR FILLING DATE: 2000-011-28
PRIOR FILLING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 30 US-10-377-072-27 (S-10-377-072-27); Sequence 27, Application US/10377072; Publication No. US20040157221A9
                                               밁
                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                             Query Match 34.8%;
Best Local Similarity 99.9%;
Matches 1996; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Millennium Pharmaceuticals APPLICANT: Curtis, Rory A.J. APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICATION NUMBER: US 60/199,801
FILING DATE: 2000-04-26
APPLICATION NUMBER: US 99/861,801
FILING DATE: 2001-05-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/816,494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 60/205,508 FILING DATE: 2000-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1861
  598 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 657
                                                                           ATGGCCCATGAGATGGATTGGAAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATCATTGAGGTCTCCTGA 2535
                                                  ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ÁGGTCACGGGÁAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCATTGAGGTCTCCTGA 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Logan, Thomas Joseph
Glucksmann, Maria A.
                                                                                                                                          ; Score 1896; Di
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       See File Wrapper or PALM.
                                                                                                                                                                                             DB
                                                                                                                                                                                             18;
                                                                                                                                             اد
                                                                                                                                               Indels
                                                                                                                                                                                             Length 1998;
                                                                                                                                          0;
                                                                                                                                               Gaps
                                                                                               597
                                               60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1920
```

1081 CCCAGCGTGCCCCAGCGTGCAGCCGTCGTTAGAGGACAGCCCGCTGGTACAGGCGCTC 1140 1678 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1737	18 CCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC	1558 TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCACAAAGGCCCGTGCATCCCGCCAGCGTG 1617	1498 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCC 1557	1438 CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGGACCTGGAGAAGCCAAAT 1497 	1378 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC 1437	1318 AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	1258 CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCATG 1317	1198 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT 1257	1138 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1197	1078 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT 1137 	1018 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA 1077	958 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1017	898 CTTGCAGGTGGGTTTGCTGAGTTCTCCTTGTTTTCCCTTGGCCTCTGTGAAGGAAAAATCC 957	838 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 897	778 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	718 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 777 		61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120
; APPLICANT: ISHI, SHIZUKO ; APPLICANT: YAMAMOTO, JUN-ICHI ; APPLICANT: ISONO, YUUKO ; APPLICANT: HIO, YURI		OR N	RESULT 31 US-10-094-749-673 ; Sequence 673, Application US/10094749	Qy 2518 ATCATTCAGGTCTCCTGA 2535	Qy 2458 AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA 2517	2398 1861	QY 2338 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA 2397	QY 2278 GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 2337	Qy 2218 ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT 2277	QY 2158 TCGGATATCTTGGCCCCCCAGACCTCTACCCCTGACCAGCAGCAGCTGGTATTTTGCC 2217	8 CTTTC	Qy 2038 TCTCCACTGCATCGAAGTGGGAGGGGGGAGGACAATTACCACACCAGCTTCCTTTTCGGC 2097	1978 AGCAA 1441 AGCAA	1918 GATAA 1381 GATAA	1858 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT	1798 1261	1738 1201	Db 1141 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200

B 8 8 8 8 8 8

음 성

유 성

8 8

뫄

8 8 8

유 성

8 B

음. 성 음

```
PRIOR APPLICATION NUMBER: 60/350, 435
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 673
LENGTH: 2102
TYPE: DNA
ORGANISM: Homo sapiens
US-10-094-749-673
                                5
                                                                    밁
                                                                                          S
                                                                                                                   유왕
                                                                                                                                                                           음 중
                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                               F
                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            श
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: OTSUKA, KAORU
APPLICANT: NAGAI, KEIICHI
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: VOSHIKAWA, TSUTOMU
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: MASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT APPLICATION NUMBER: US/10/094,749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local !
                                           1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2089; Conservative
                                                                       541
                                                                                                                            481
                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                    843
                                                                                                                                                                                                                                                                                                301
                601
                                                                                                                                                      963
                                                                                                                                                                                    421
                                                                                                                                                                                                              903
                                                                                                                                                                                                                                                                                                                           783
                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                          663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  483 TACATCATCGTGGCAAATTAAAGAAGAGGGGGGGAAAAGAGAGGACTTATTGTCATGGC
                                                                                                                                                                                                                                                                                                                                                                                  723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      h 34.7%;
Similarity 99.8%;
                                          GAATGGGATTGGTTATGTGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTTATCCC 1142
                                                                                    TCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATACAGCA 1082
                                                                                                                                                                                                 AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCT
                                                                                                                                                                                                                                                                                                                      TTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCCCACAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGG
                                                                                                                            AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCCTAAT
                                                                                                                                            AGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCCAACATTGGGCCAACCCCGAAT 1022
                                                                                                                                                                                    AGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCCACTCT
                                                                                                                                                                                                                                          TTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGC
                                                                                                                                                                                                                                                         TTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGC
                                                                                                                                                                                                                                                                                                TTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAGGACAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAAAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTCATGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 1889; DB Pred. No. 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2102;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                            540
                                                                                                                                                                                    480
                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                    902
                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                         842
                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                  782
                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                        722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        602
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
á
                     밁
                                                   5
                                                                                문
                                                                                                      5
                                                                                                                                문
                                                                                                                                                              5
                                                                                                                                                                                              밁
                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
 2223
                             1681
                                                                                   1621
                                                                                                             2103
                                                                                                                                         1561
                                                                                                                                                                     2043
                                                                                                                                                                                               1501
                                                                                                                                                                                                                          1983
                                                                                                                                                                                                                                                       1441
                                                                                                                                                                                                                                                                                 1923
                                                                                                                                                                                                                                                                                                            1381
                                                                                                                                                                                                                                                                                                                                        1863
                                                                                                                                                                                                                                                                                                                                                                  1321
                                                                                                                                                                                                                                                                                                                                                                                               1803
                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1563
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1503
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1203
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  661
 GTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCTGCCTA 2282
                                                                                                                                                                                                                                                                            GAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGAGCAA
                                                                                                                                                                                                                                                                                                                           ATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTCCTGATAA
                                                                                                                                                                                                                                                                                                                                                                                                                                             GGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTGCCGTG
                                           TATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTTGCCACAGA
                                                                                    CACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCACTCGGA
                                                                                                   CACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTTGGCACTCGGA
                                                                                                                                                           ACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGCCTTTC
                                                                                                                                                                                               GCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCC
                                                                                                                                                                                                                     GCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                  ATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCT 1862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAACCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGAACCAGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATCATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGATGTGTTTCTAGT
                             TATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCCACAGA
                                                                                                                                                                                                                                                                                                             ATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAA
                                                                                                                                                                                                                                                                                                                                                                    ATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                           GGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTCAGTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTGCCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGTCCCTGCTGTCTCAGAGGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCCTGTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATGAAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTTCTAGT
                           1740
                                                                                   1680
                                                                                                                                                                                                                                                                                 1982
                                                                                                                                                                                                                                                                                                                                        1922
                                                                                                                                         1620
                                                                                                                                                                     2102
                                                                                                                                                                                                 1560
                                                                                                                                                                                                                          2042
                                                                                                                                                                                                                                                       1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                       1802
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1742
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1682
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1622
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1562
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1020
                                                                                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                    1380
                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1502
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1382
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          780
```

Qy 1934 GCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAGGCGATTGCATT 1993	Qy 1814 CTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAGCTATGCCAGTTCT 1873	Ative GCTGGAAG GCTGGAAG GCTGGAAG GTTCAGCCA	CURRENT FILING DATE: 2002-03-27 NUMBER OF SEQ ID NOS: 5458 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 2429 LENGTH: 1916 TYPE: DNA ORGANISM: Homo sapiens US-10-108-260A-2429 Query Match Best Local Similarity 99.8%: Pred. No. 0.	ESULT 32 S-10-108-260A S-quence 242 Sequence 1242 Publication GENERAL INFC APPLICANT: TITLE OF IN FILE REFERE	QY 2463 ACGGGAGAAGCTGCGAAATGGAATTTGGAGAGAGCATCATGTCAGAGAACAGGTC 1980 QY 2463 ACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTTTTTCGGGGAGCATGGAAATCAT 2522	1741 GTCC 2283 CAGG 2283 CAGG 1801 CAGG 2343 GCCJ 1861 GCCJ 2403 GTTT
\(\text{P} \) \(\text{Q} \) \(\text{P} \) \(\text{Q} \) \(\text{P} \) \(\text{Q} \) \(\te	D	. B & B & B	3 8 8 8 8 8 8	D	D 04 04 04	D Q D Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q Q
3014 TGATCCTATCCAAAGCTGATTCACAAACCCACGCCTCACCTGACAGCCGAGGGACACGAGC 3073	54 99	AGATCAGCTAATACTTCTCTCAACAAAATGGAAGGCAGATGCTAGAATCCCCCTAGA CGGAGGAAAACCATTTTATTCAGTGAATTACACATCCTCTTGTTCTTAAAAAAGCAAGTG [94 TCCCTGTAAATCTGAAATATATATATGTACATACATATATAT	2414 GAAGCTGCCAAATGGAATTTGGACAGAGCATCAGGTCACAGAACAGGTCACGGGAAGAGC 2473	294 740 354 360	2114 AGCACCTCACGAAGTCTGGCCTGGGCCTTAAGGGCTGGGACTCGGATATCTTGGCCC 2173

```
US-10-072-012-257

US-10-072-012-257

Sequence 257, Application US/10072012

Publication No. US20040033493A1

GENERAL IMPORMATION:

APPLICANT: Tebrinev, Velizar

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Patturajan, Meera

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Spytek, Kimberly

APPLICANT: Gangolli, Beha

APPLICANT: Gangolli, Beha

APPLICANT: Ratefelli, Luca

APPLICANT: Ratefelli, Luca

APPLICANT: Ratefelli, Luca

APPLICANT: Miller, Charles E.

APPLICANT: Anderson, David W.

APPLICANT: Anderson, David W.

APPLICANT: Gangolli, Beha

APPLICANT: Gangolli, Beha

APPLICANT: Gangolli, Beha

APPLICANT: Gangolli, Beha

APPLICANT: Gusev, Vladimir Y.

APPLICANT: Gusev, Vladimir Y.

APPLICANT: Pana, Carol E. A

APPLICANT: Posses, William M.

APPLICANT: Posses, William M.

APPLICANT: Alsobrook II, John P.

APPLICANT: Burgess, Catherine E.

ITILS OF INVENTION INVERSE: US/10/072,012

CURRENT APPLICATION NUMBER: US/10/072,012

PRIOR APPLICATION NUMBER: US/10/072,012

PRIOR APPLICATION NUMBER: 60/265,102

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GGGATTGTCAATCCTTTAAATAAAGATGAACTTGGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGGGAAACTGTCTAGGATTCAGCTGAACCACCAGGAACCTGGCAACATCACGATTTAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCATTGTGAATAGGTAGGTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAAGGTTGGGAGGCTAACGAGTCTACCTCCCTCTTTGTAAATCAAAGAATTGTTTAAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAAAATTCCCGTGGGCCTAGATGGAGATAA-TTTTTTTTTCTTCTCAGCTTTATGAAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCATTGTGAATAGGTAGGTAGCTAGTCACACTTTTCAGACCAATTCAAACTGTCTATGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1916
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1757
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1817
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       3373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 1391
; SOFTWARE: PatentIN Ver. 2:1
; SEQ ID NO 257
; SEQ ID NO 257
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-072-012-257
                                                           δ
                                                                                                                                   Ş
                                                                                                                                                                                  밁
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Sin Matches 2068;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
                                                                                                                                                                                                                             1198
                                                                                                                                                                                                                                                                                                         1138
                                                                                                                                                                                                                                                                                                                                                                                       1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1018
                                                                                                          781
                                                                                                                                                                                        721
                                                                                                                                                                                                                                                                  661
                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    щ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Similarity
                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGAAAAGAGGACTTATTGTTGTC
                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTAAATGCCAGCTATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAAGTTCTCTCGGTGTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCCATGAGATGATTGGAAACTCGAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ACCATTACATCATCGTGGCAAATTAAAGAAGGAGGTGGGGAAAAAGAGGACTTATTGTTGTC
                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                        CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACTOTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                24.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1318; DI
Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       띪
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1077
                                                                                                            840
                                                                                                                                                 1317
                                                                                                                                                                                                                               1257
                                                                                                                                                                                                                                                                                                                                                                                       1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         837
```

780

720

660

600

540

480 957 420 897 360 300

240 717

```
1732
                                                                                                                                                                                                                                                                                                           2218
                                                                                                                                                                                                                                                                                                                                                                                                                          1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                           2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           961
AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                           AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                        CÁGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                        CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAAGAGACCCCTTTGAA
                                                                                                                                                                                     GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                             GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCCG
                                                                                                                                                                                                                                                                                      TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                         TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                CTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGTGCCGACTCTGCTACCTCAGAGGCAGCAGCAAAGGCCCGTGCATCCCGCCAGCGTG 1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          - CCAGCGTACCCAGCGTGCAGCCGTCGCTGAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
 2517
                                                                                                                                                                                       1851
                                                                                                                                                                                                                                                                                                                                                                              2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                     2157
                                     1971
                                                                        2457
                                                                                                              1911
                                                                                                                                                 2397
                                                                                                                                                                                                                          2337
                                                                                                                                                                                                                                                                1791
                                                                                                                                                                                                                                                                                                   2277
                                                                                                                                                                                                                                                                                                                                         1731
                                                                                                                                                                                                                                                                                                                                                                                                                  1671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1737
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1437
```

Ś 밁

В Ś

Ş 밁

밁

밁 Ś

Ş 밁 8 밁 Ś 밁 S 밁 Ş 뭐 S

S 밁 δ 밁 Ş 덩 S 밁 δ 뭐 Ś В Ş 밁 S 당 8

ç

<u>,</u>

Gaps

```
; LENGTH: 2200
; TYPE: DNA
; ORGANISM: Homo :
US-10-072-012-255
                                                                                                                                                                                                                                                               FILE REFERENCE: 21402-58

CURRENT APPLICATION NUMBER: US/10/072,012

CURRENT FILING DATE: 2002-01-31

PRIOR APPLICATION NUMBER: 60/265,102

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR PILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: 60/265,517

PRIOR APPLICATION NUMBER: 60/265,412

PRIOR APPLICATION NUMBER: 60/265,412

PRIOR APPLICATION NUMBER: 60/265,395

PRIOR FILING DATE: 2001-01-31

PRIOR APPLICATION NUMBER: 60/266,406

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,767

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR FILING DATE: 2001-02-07

PRIOR FILING DATE: 2001-02-07

PRIOR PILING DATE: 2001-02-07

PRIOR PILING DATE: 2001-02-07

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR APPLICATION NUMBER: 60/266,975

PRIOR PILING DATE: 2001-02-09

PRIOR FILING DATE: 2001-02-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
APPLICANT: Patturajan, Meera
APPLICANT: Abrankets, Richard
APPLICANT: Li, Li
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 34
US-10-072-012-255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                    Remaining Prior Application
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 255
LENGTH: 2200
Query Match 22.5%; Score 1225; Best Local Similarity 100.0%; Pred. No. 0; Matches 1225; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 255, Appropriate Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1972
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Li, Li
Gangolli, Esha
: Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond of Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATCATTGAGGTCTCCTGAGAAGAAGACACTTGTGACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10072012
o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Meera
                                                                                                                                                                                                                                                 data removed -
                                                                                                                                                                                                                                               See File Wrapper
                                              DΒ
                                            17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Encoding
                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2557
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Same
                                              2200;
                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2031
```

रु दे र

밁

2490	2431 TTTGGAGAGAGCATCATGTCAGAGAACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGT 2
io	939 AGCTGGCATGAAGAGCCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAA
4	371 AGCTGGCATGAAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAA
9 0	87
ν α γ	######################################
31	i in
2250	2191 TCCCTGACCAGCAGCTGGTATTTTGCCACAGAGTCCTCACACTTCTACTCTGCCTCAGCC 2
2190	2131 GCTGGCCTGGGCCTTAAGGGCTGGCACTCGGATATCTTGGCCCCCCAGACCTCTACCCCT 2
1698	1639 AATTACCACAGCTTCCTTTTCGGCCTTTCCACCAGCAGCAGCACCTCACGAAGTCT
63	
ÖÜ	011 4
7 01	1951 CAGACCGCCAGGCCTTCAGACAGCCAGAGCCAGCATTGCATTCGGTCAGAACCAGCAGC 2
1950	1891 TCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGCAGCCAGC
L458	1831 CCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTA 1
L830	1771 AGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCTTTGGAATACTACAAA 1
L770 L338	1711 GACAGCAATAAGCTCAAGCGTTCCTTCTCTGGATATCAAATCAGTTTCATATTCAGCC 1
1710	1651 GAGGACAGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAA 1
L650 L218	1591 CAAAGGCCCGTGCATCCCGCCAGCGTGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGTTA 1
1590	1531 AAAAGCGAGACGCCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGA 1
1530	1471 AAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAG 1
L470 L038	1411 CTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTC 1
1410 978	1351 AGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTC 1

중 음 중

음 성 음

ð

음 중 밁 8 밁 र् 밁 5 밁 Ś 밁 S 밁 S 뭐 5 멍 र् 밁 S 밁 S 밁 S 밁 S

```
APPLICANT: Van 't Veer, Laura
APPLICANT: Van de Vijver, Marc
APPLICANT: Bernards, Rene
ITITLE OF INVENTION: Diagnosis and Prognosis of Breast Cancer Pati
PILE REFERENCE: 9301-175-999
CURRENT APPLICATION NUMBER: US/10/172,118
CURRENT FILING DATE: 2002-06-14
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR APPLICATION NUMBER: 60/380,770
PRIOR FILING DATE: 2002-05-14
NUMBER OF SEQ ID NOS: 2699
SEQ ID NO 2599
LENGTH: 940
TYPE: DNA
ORGANISM: Homo sapiens
PUBLICATION INFORMATION:
PUBLICATION INFORMATION:
DATABASE BACCESSION NUMBER: Contig55674
DATABASE BATTRY DATE: 2001-06-18
                                                                                                                                                              밁
                                                                                                                                                                                   S
                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                 ક
                                             밁
                                                                       δ
                                                                                                  밁
                                                                                                                              S
                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                             닭
                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 35
US-10-172-118-2599/c
Sequence 2599, Application US/10172118
; Publication No. US20030224374A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: Linsley, Peter
APPLICANT: Mao, Mao
APPLICANT: Roberts, Chris
APPLICANT: Van 't Veer, Lau
APPLICANT: Van de Vijver, M
                                                                                                                                                                                                                                                                                                                                                                                    Query Match 17.2%;
Best Local Similarity 100.0%;
Matches 940; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                         4566
                                                                                                                                    4446
                                                                                                                                                                                                                                               4326
                                                                                                                                                                                                                                                                                                                                                         4206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1999
                                                                               4506
                                                                                                                                                                                          4386
                                                                                                                                                                                                                                                                                                  4266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2491
 580
                                                      640
                                                                                                          700
                                                                                                                                                                760
                                                                                                                                                                                                                     820
                                                                                                                                                                                                                                                                           088
                                                                                                                                                                                                                                                                                                                                940
AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA 4625
                                                                                                                                                                                                                                                                                                                              ACACAGTAGTTTTTGATGTTATGTACACACACACACACAATGTGTAACAGTTCACCACTTCC
                                                                                                                             ACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                             GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                                     GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCCTATGATGGGGT
                                                                                                                                                                                                                                                                                           TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                     GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                                                                           TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACACAGTAGT
                                                                                                          ACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                    17.2%; Score 940; DE 100.0%; Pred. No. 0; ive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2575
                                                                                                                                                                                                                                                                                                                                                                                                                BG
                                                                                                                                                                                                                                                                                                                                                                                                                17;
                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Patients
                                                                                                                                                                                                                                                                                                                                                                                    0;
                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                               4565
                                                                                                                                     4505
                                                                                                                                                                                           4445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2550
                                                       581
                                                                                                                                                                                                                                               4385
                                                                                                                                                                                                                                                                                                     4325
                                                                                                                                                                                                                                                                                                                                 881
                                                                                                            641
                                                                                                                                                                701
                                                                                                                                                                                                                      761
                                                                                                                                                                                                                                                                           821
                                                                                                                                                                                                                                                                                                                                                           4265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2058
                                                                                                                                                                                                                                                                                                                                                                                      0
```

```
APPLICANT: Dai, Hongyue
APPLICANT: He, Yudong
APPLICANT: He, Yudong
APPLICANT: He, Yudong
APPLICANT: Mao, Mao
APPLICANT: Mao, Mao
APPLICANT: Roberts, Christopher J.
APPLICANT: Van 't Veer, Laura Johanna
APPLICANT: Van 't Veer, Marc J.
APPLICANT: Bernards, Rene
TITLE OF INVENTION: Diagnosis and Prognosis of
FILE REFERENCE: 9301-188-99
CURRENT APPLICATION NUMBER: US/10/342,887
CURRENT FILING DATE: 2003-01-15
PRIOR APPLICATION NUMBER: 60/389,918
PRIOR FILING DATE: 2001-06-18
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR APPLICATION NUMBER: 60/380,710
PRIOR APPLICATION NUMBER: 10/172,118
PRIOR FILING DATE: 2002-06-14
PRIOR FILING DATE: 2002-06-14
PRIOR FILING DATE: 2002-06-14
NUMBER OF SEQ ID NOS: 2699
                      Ś
                                                                                                ; SEQ ID NO 2599
; LENGTH: 940
; TYPE: DNA
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-342-887-2599
                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 36
US-10-342-887-2599/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                            Query Match 17.2%; Score 940; DE Best Local Similarity 100.0%; Pred. No. 0; Matches 940; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2599, Application US/10342887 Publication No. US20040058340A1 GENERAL INFORMATION:
    4206 GTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACTTCATGTTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5106
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4986
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4926
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4866
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAA 4925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTTTCAGGAGGTTTGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                           얁
                                                                    17;
                                                                                                                                                                                                                                                                                           Breast Cancer Patients
                                             ٥,
                                                                    Length
                                            Indels
                                            0
                                           Gaps
                  4265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5105
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              461
                                           0
US-10-027-632-144266/c
; Sequence 144266, Application US/10027632
; Publication No. US20020198371A1
; GENERAL INFORMATION:
; APPLICANT: Wang, David G.
; TITLE OF INVENTION: Identification and Mapping of Single;
; TITLE OF INVENTION: Polymorphisms in the Human Genome
; FILE REFERENCE: 108827.129
; CURRENT APPLICATION NUMBER: US/10/027,632
                                                                                                                    RESULT 37
                                                                                                                                                          뮍
                                                                                                                                                                              S
                                                                                                                                                                                                             片
                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                            В
                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 γ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                    5106
                                                                                                                                                                                                                                     5046
                                                                                                                                                                                                                                                                                                                                         4926
                                                                                                                                                                                                                                                                                       4986
                                                                                                                                                                                                                                                                                                                                                                                            4866
                                                                                                                                                                                                                                                                                                                                                                                                                                            4806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4746
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4326
                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4266
                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                     340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              700
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 760
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  820
                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       940
```

```
AATGATTAAATAAAATCAAAACTGGTACCTGTTTATACAT 5145
                                                                                                                        TTAGATGGAAAGACTGTAAAIGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                                                        AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                                                       TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAA 4925
                                                                                                                                                                                  TTAGATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAG
                                                                                                                                                                                                                                                                               AGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAG
                                                                                                                                                                                                                                                                                                                                                                          TCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAQGGGTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGCCATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACACAGTAGTTTTGATGTTATGTACACACACACACATGTGTAACAGTTCACCACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACACAGTAGTTTTTGATGTTATGTACACACACACAAATGTGTAACAGTTCACCACTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GGCCATGGTCCCTTCCTTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGATITGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTAAAGTGAAGGCAGAAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACAGACCGACTTGGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TATGGTGACTTCTAAAACCAGCACAGAATGATATGACTCAACACACAGACCGACTTGGTTAT 4325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACCAGGATGTGACTTCATGTTTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGATTIGAGTTAGTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACAAATAATGTGCTATGATGGGGT
                                                                                                                                                                                                                                 5045
                                                                                          41
                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                            4985
                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            761
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       821
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  881
```

Nucleotide

```
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILING DATE: 2000-02-24
PRIOR PILING DATE: 1909-11-23
PRIOR PILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR FILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
SOPTWARE: PRETSEQ for Windows Version 4.0
SEQ ID NO 144266
                                                       밁
                                                                                S
                                                                                                                             밁
                                                                                                                                                      δ
                                                                                                                                                                                           밁
                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR PFLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR FILING DATE: 2000-02-24
PRIOR PRILING DATE: 1200-02-24
PRIOR PRILING DATE: 1999-11-23
PRIOR FILING DATE: 1999-11-23
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-08-09
PRIOR PILING DATE: 1999-08-09
PRIOR PILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 860
                    5024
                                                                                                                                                                                                                                        4844
                                                                                                                                                                                                                                                                                                                 4784
                                                                                                                                                                                                                                                                                                                                                                                                                                                              4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4544
                                                                                         4964
                                                                                                                                                                  4904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4424 GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4364 AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTAT
                                                                                                                                                                                                                                                                                                                                                     338
                                                                                                                                                                                                                                                                                                                                                                                                                            398
                                                                                                                             158
                                                                                                                                                                                                    218
                                                                                                                                                                                                                                                                               278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           681;
                                                       98
TGTTCTTTTGAAGTAAGGCCAG 5045
                                                                                                                                                    GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA
                                                                                                                                                                                                                               GTGGGGTGGTCGCCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG
                                                                                                                                                                                                                                                                                                                                                                        ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTGTCATTTAGGGCTTCTCTTGGCCATGGTCCCCCTTCCTGGAACTGTGATGTAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTTGGGGCACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGTAACAGTTCACCACTTCCAGAGTGTGGGTCATGCCCAAAACATGTTTAAGAAAGGAA 4603
                                                                            ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGGAATATAG
                                                                                                                             GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA
                                                                                                                                                                                                    GTGGGGTGGTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG
                                                                                                                                                                                                                                                                             ACTGCCGTGGCGAAGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                                                                 ACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                                                                                                     ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                          AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGGSACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ANATAATGTGCTATGATGGGGTGTANAGTGAAGGCCAGAAGAGGGTCAGCCGCATTGTTAT
                                                         ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11.6%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 631;
Pred. No. 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 13;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0,
                                                                                         5023
                                                                                                                                                                4963
                                                                                                                                                                                                    159
                                                                                                                                                                                                                                        4903
                                                                                                                                                                                                                                                                                                                                                                                        4783
                                                                                                                                                                                                                                                                                                                                                                                                                                                              4723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          579
                                                       39
                                                                                                                               99
                                                                                                                                                                                                                                                                             219
                                                                                                                                                                                                                                                                                                                 4843
                                                                                                                                                                                                                                                                                                                                                     279
                                                                                                                                                                                                                                                                                                                                                                                                                          339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
```

```
ঠ
                                                                                                            밁
                                                                                                                                     S
                                                                                                                                                                                    밁
                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-027-632-144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILE REFERENCE: 108827:129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/218,006

PRIOR FILING DATE: 2000-07-12

PRIOR PILING DATE: 2000-04-20

PRIOR PILING DATE: 2000-04-20

PRIOR PILING DATE: 2000-03-29

PRIOR PILING DATE: 2000-03-29

PRIOR PILING DATE: 2000-02-24

PRIOR PILING DATE: 2000-02-24

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR PILING DATE: 1999-11-23

PRIOR PILING DATE: 1999-09-28

PRIOR APPLICATION NUMBER: US 60/166,358

PRIOR APPLICATION NUMBER: US 60/166,358

PRIOR APPLICATION NUMBER: US 60/146,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-027-632-144266/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 144266, Application US/10027632

Publication No. US20030204075A9

GENERAL INFORMATION:

APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide

TITLE OF INVENTION: Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 144266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches 681;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 860
                                                                       4784
                                                                                                                                                                                                                           4664
                                                                                                                                                                                                                                                                                                                                                                        4544
4844 GTGGGGTGGTGGCTCTCTTCAGCATGTAATTGGGGAAACCCTCGCGTCTACTAGGG 490:
                                                                                                                                                 4724
                                                                                                                                                                                                                                                                                                 4604
                                                                                                                                                                                                                                                                                                                                                                                                                                    4424 GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTTTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4364 AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DNA
                                    278
                                                                                                            338
                                                                                                                                                                                    398
                                                                                                                                                                                                                                                              458
                                                                                                                                                                                                                                                                                                                                       518
                                                                                                                                                                                                                                                                                                                                                                                                               578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                        ACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTTGGATGTCTTTAG
                                                                                                                                                                                                         AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                                         TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                                                                              ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                   ACATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAG
                                                                                                                                                                                    AGCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGSACTTGGTTTTAATGAGCT
                                                                                                                                                                                                                                                                                                                                       TGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTAT
                                  ACTGCCGTGGCGAAGGGGTGGCCTCGGAGGCAGGCTCTGGAGCTGCTTGGATGTCTTTAG
                                                                                                                                                                                                                                                                                                                                                                                                               TGTTCTTTTGAAGTAAGGCCAG 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11.6%;
99.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; Score 631; DB
; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             BB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length 860;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                       4843
                                                                                                                                               4783
                                                                                                                                                                                                                         4723
                                                                                                                                                                                                                                                                                                  4663
                                                                                                                                                                                                                                                                                                                                       459
                                                                                                                                                                                                                                                                                                                                                                          4603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4423
                                  219
                                                                                                            279
                                                                                                                                                                                    339
                                                                                                                                                                                                                                                              399
                                                                                                                                                                                                                                                                                                                                                                                                               519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 639
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
```

```
片
                                                         Ś
                                                                                               밁
                                                                                                                           δ
                                                                                                                                                                  밁
                                                                                                                                                                                                   S
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-147620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR PILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR PILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR PILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR PILING DATE: 1999-11-23
PRIOR PILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/146,002
PRIOR PILING DATE: 1999-09-28
PRIOR PILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
PRIOR FILING DATE: 1999-09-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-027-632-147620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 325720
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 147620
LENGTH: 841
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 147620, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
                                                            4245
                                                                                                                               4185
                                                                                                                                                                                                                                                         4065 TTGAGTTTTATCAGCTACAATGTGGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                                               4005 AACATAGGAGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5024
                             241
                                                                                               181
                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   158
                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                   , 008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         218
                                                                                                                                                                                                                                                                                                              H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98
                                        AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTC 4304
                                                                                                              AGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                                                   TTTTGGGGGTGGGGCGGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCGCT
                                                                                                                                                                                                                                    TTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                         AACATAGGAGGTCACTGGAACAAGTGATAGTGCAGATTGGCTTTCAAACATCCTCCTGGC
                                                                                          AGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                              TTTTGGGGGTGGGGTGGGGGGTGTTGTCATTGTTCTTTCCCTTTCCTGTAAGTGTCGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAG 502:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA 4963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGTTCTTTTGAAGTAAGGCCAG 5045
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GTGATACAGATGGTGATTTTAAAGAGCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGATTTAGGACATGTGTAAAGTTAGATGGAAAGACTGTAAATGTTTAATATGAATATAG
                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                                            11.0%;
99.5%;
                                                                                                                                                                                                                                                                                                                                                                           Score 600; DB 13;
Pred. No. 6.5e-310;
0; Mismatches 4;
                                                                                                                                                                                                                                                                                                                                                                                                              Length 841;
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                               4184
                                                                                                                                                                                                                                                                      4124
                      300
                                                                                                                           4244
                                                                                          240
                                                                                                                                                              180
                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                            4064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               . 99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
Query Match
Best Local Similarity
Matches 800; Conserv
```

```
GENERAL INFORMATION: GENERAL INFORMATION: GENERAL INFORMATION: Identification and Mapping of Single Nucleotide
FITLE OF INVENTION: Identification and Mapping of Single Nucleotide
FITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 106827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/193,483
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/185,218
PRIOR APPLICATION NUMBER: US 60/187,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
PRIOR APPLICATION NUMBER: US 60/167,363
                                                                                             ; ORGANISM: Human US-10-027-632-147620
                                                                                                                                     ; NUMBER OF SEQ ID NOS: 3; SOFTWARE: Fast SEQ for W; SEQ ID NO 147620; LENGTH: 841
; TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-027-632-147620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 147620, Application US/10027632 Publication No. US20030204075A9
                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR FILING DATE: 1999-09-28
PRIOR APPLICATION NUMBER: US 60/146,002
                                                                                                                                                                                                                                                     PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4785
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4545
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCCGTGGCGAAGGGGTGGCCTC 4808
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCCGTGGCGAAGGGGTGGCCTC 804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CATTCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGTAGCTCCTTAACGATGTTTCAGGAGGTTTGGGGGACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGGTCAGCCGCATTGTTATG 442
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATACTGGGAAAGTGCYGGTCAACGATTTGAGTTAGTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA 4364
                                                                                                                                                                                                             for Windows
                          11.0%;
99.5%;
                                                                                                                                                                                                             Version
Score 600; DB 17;
Pred. No. 6.5e-310;
0; Mismatches 4;
                                             Length 841;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         4724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
```

Conservative

,0

Indels

0

Gaps

밁

문 S

```
RESULT 41
US-10-027-632-24920/c
  Sequence 24920, Application US/10027632

Publication No. US20020198371A1

GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-07-12

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4725
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4185
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1065
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                            781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                _
                                                                                                                                                                                                                                                                                                                                                                                          CTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CATCCTACAGCCTTTAGTGCTGGTTCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCAGTAGCTCCTTGCTAACGATGTTTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATACTGGGAAAGTGCTGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TTTTGGGGGTGGGGCTGGGCGGTGTTGTCATTGTTCCCTTCCCTGTAAGTGTCCCTTTTTGGGGGTGGGGCTGGGCGGTGTTGTCATTGTTCTTTCCCTTCCTGTAAGTGTCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTGTAACAGTTCACCACTTCCAGAGTGTGGGTCATGCCCAAAACATGTTTTAAGAAAGGAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATACTGGGAAAGTGCYGGTCAACGATTTGAGTTAGTTTTTAGATATACATTGAAATCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTAGTTGTGCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAATGATATGACTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTTGCTGCCTCGTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAGTTTTTTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTTGCTGCCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAAATGGACAGTTTTTTTGACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTGAGTTTTATCAGCTACAGTGTGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTGAGTTTTATCAGCTACAATGTGGGGTCCTCTTTTGAAGCCTTAATTCACAACAGCAGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                      4808
                                                                                                                                                                                                                                                                                                                                                                                          804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       4604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; PRIOR APPLICATION NUMBER: US 60/193,483
; PRIOR FILLING DATE: 2000-03-29
; PRIOR APPLICATION UNMBER: US 60/185,218
; PRIOR FILLING DATE: 2000-02-24
; PRIOR FILLING DATE: 1909-01-23
; PRIOR FILLING DATE: 1999-11-23
; PRIOR APPLICATION NUMBER: US 60/156,358
; PRIOR APPLICATION NUMBER: US 60/146,002
; PRIOR APPLICATION NUMBER: US 60/146,002
; PRIOR FILLING DATE: 1999-08-09
; PRIOR FILLING DATE:
RESULT 42
US-10-027-632-24921/c
US-10-027-632-24921, Application US/10027632
Publication No. US20020198371A1
GENERAL INFORMATION:
APPLICANT: Wang, David G.
                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 9.9%;
Best Local Similarity 99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 641;
                                                                                                                                                                                                                                  4989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4749
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4449
                                                                                                                                                                                                                                                                                                                         4929
                                                                                                                                                                                                                                                                                                                                                                                                               4869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4389
                                                                                                                                                                                                                                                                                                                                                                   163
                                                                                                                                                                                                                                                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    643
                                                                                                                                                                                                                                                                              103
                                                                                                                                                                                      43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                             GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT
                                                                                                                                                                                                                                                                                                   GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                                                                                                                                                                                            GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGTAGTTTTTGATGTTATGTACACACACACAACATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTTCACA
                                                                                                                                                                                      GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT
                                                                                                                                                                                                                                                                              GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                                                                                                                                                                     GCATGTAATTGGGGAAACCCCTCGYKTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CATGGTCCCCTTCCTTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTCAGGAGGTTTGGGGACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCCTTCTCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGTAGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/146,002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60/156,358
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60/167,363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60/193,483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 541; DB 13;
Pred. No. 2.8e-278;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                  5031
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                 4928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4568
```

ઠ

5 밁 ક 유정

밁 S 밁 8 밁 ş 밁 S 밁 ঠ

밁 Ş

44 4988 104 164 4868 4808

284

224

4748

344

4688

4628 464

404

4508

524

4448

0

584

음 중 밁 S 밁 ঠ

밁

43

GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 1

```
; NUMBER OF SEQ ID NOS: 3:
; SOFTWARE: FastSEQ for W
; SEQ ID NO 24921
; LENGTH: 803
; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR FILLING DATE: 2000-04-20
PRIOR PELICATION NUMBER: US 60/193,483
PRIOR FILLING DATE: 2000-03-29
PRIOR PELICATION NUMBER: US 60/185,218
PRIOR PELICATION NUMBER: US 60/167,363
PRIOR FILLING DATE: 1999-11-23
PRIOR FILLING DATE: 1999-11-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Simi
Matches 641;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: US 60/146,002 PRIOR FILING DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR FILING DATE: 2000-07-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Local Similarity
                            4989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REFERENCE: 108827.1
                                                                                                                                                                                     4869
                                                                                                                                                                                                                                                              4809
                                                                                                                                                                                                                                                                                                                                         4749
                                                                                                                                                                                                                                                                                                                                                                                                                       4689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4389 AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/156,358 FILING DATE: 1999-09-28
                                                                                                                                              163
                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                                                       283
                                                                                                                                                                                                                                                                                                                                                                                  343
                                                                                                                                                                                                                                                                                                                                                                                                                                                             403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             643
GATGGAAAGACTGTAAATGTTTTAATATGGATATAGTGTTCTTT
                                                                                         GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
                                                                                                                                                                          GCATGTAATTGGGGAAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                  CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                               GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                   TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                           TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTCTTGGC 468
                                                                                                                                                                                                                                                                                                                                                                            CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCAGGAGGTTTGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT 4628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGTAGTTTTTGATGTTATGTACACACACACACAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGTĀGTTTTTGATGTTATGTACACACACACACAATGTGTJAACAGTTCACCACTTCCAGA 4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTTGAGTTAGTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 541; DB 13;
Pred. No. 2.8e-278;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                   4748
                                                               44
                                                                                                                                          104
                                                                                                                                                                                 4928
                                                                                                                                                                                                                     164
                                                                                                                                                                                                                                                                                                 224
                                                                                                                                                                                                                                                                                                                                       4808
                                                                                                                                                                                                                                                                                                                                                                            284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                       344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0;
```

δ 밁 Ś 문 δ В δ 밁 Ś 밁 δ 밁 Ś 밁 ঠ 밁 ঠ 밁 S ₽ á

```
S
                                      В
                                                                        Ś
                                                                                                                        밁
                                                                                                                                                            Ś
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/198,676
PRIOR FILING DATE: 2000-04-20
PRIOR PELICATION NUMBER: US 60/193,483
PRIOR PELICATION NUMBER: US 60/193,483
PRIOR PELICATION NUMBER: US 60/185,218
PRIOR PELICATION NUMBER: US 60/167,363
PRIOR PELICATION NUMBER: US 60/167,363
PRIOR PELICATION NUMBER: US 60/167,363
PRIOR PELICATION NUMBER: US 60/156,358
PRIOR APPLICATION NUMBER: US 60/156,358
PRIOR PELIMG DATE: 1999-09-28
PRIOR PELIMG DATE: 1999-09-28
PRIOR PELIMG DATE: 1999-09-28
PRIOR PELIMG DATE: 1999-09-29
PRIOR PELIMG DATE: 1999-09-29
PRIOR PELIMG DATE: 1999-08-09
PRIOR PELIMG DATE: 1999-08-09
PRIOR PELIMG DATE: 1999-08-09
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 43
US-10-027-632-24920/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NUMBER OF SEQ ID NOS:
SOFTWARE: FastSEQ for
SEQ ID NO 24920
LENGTH: 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity Matches 641; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 24920, Application US/10027632 Publication No. US20030204075A9 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Wang, David G.

TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
FILE REFERENCE: 108827.129
CURRENT APPLICATION NUMBER: US/10/027,632
CURRENT FILING DATE: 2002-04-30
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
PRIOR APPLICATION NUMBER: US 60/218,006
                                                                               4809
                                                                                                                                                                                                                                                                                                                               4629
                                                                                                                                                              4749
                                                                                                                                                                                                                                                4689
                                                                                                                                                                                                                                                                                                                                                                                                              4569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4449
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4509
                                        223
                                                                                                                                                                                                         343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4389 AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                        283
                                                                                                                                                                                                                                                                                        403
                                                                                                                                                                                                                                                                                                                                                                        463
                                                                                                                                                                                                                                                                                                                                                                                                                                                       523
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        583
GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAAAGA 4928
                                                                           TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                            CATGGTCCCCTTCCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                                            TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTTGGC 4688
                                                                                                                                                                                                                                                                                                                                                                                               GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                     GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA 4568
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGTGAAGGCAGAAGAGGGTCAGCCGCATTGTTATGATACTGGGAAAGTGCTGGTCAACG
                                                                                                                                                                                                     CATGGTCCCCTTCCTGGÄÄCTGTGATGTÄGTCÄCATCCTÄCÄGCCTTTAGTGCTGGT
                                                                                                                                                                                                                                                                                      TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGTAGTTTTTGATGTTATGTACACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 541; DB 17;
Pred. No. 2.8e-278;
0; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 803;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                              4808
                                                                                                                                                                                                                                             4748
                                                                                                                                                                                                                                                                                                                                                                                                            4628
                                      164
                                                                                                                                                                                                                                                                                                                                                                     404
                                                                                                                     224
                                                                                                                                                                                                                                                                                      344
                                                                                                                                                                                                     284
                                                                                                                                                                                                                                                                                                                                                                                                                                                     464
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    524
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     584
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
FILE DOE INVENTION: FOLYMOLPHIBMS IN CASE OF PILE REFERENCE: 108627.129

CURRENT APPLICATION NUMBER: US/10/027,632

CURRENT FILING DATE: 2002-04-30

PRIOR APPLICATION NUMBER: US 60/218,006

PRIOR FILING DATE: 2000-07-12

PRIOR APPLICATION NUMBER: US 60/198,676

PRIOR FILING DATE: 2000-04-20

PRIOR APPLICATION NUMBER: US 60/193,483

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/185,218

PRIOR APPLICATION NUMBER: US 60/167,363

PRIOR PILING DATE: 2000-02-24

PRIOR PILING DATE: 1999-11-23

PRIOR PILING DATE: 1999-09-28

PRIOR PILING DATE: 1999-09-28
                       ર્શ
                                                                 밁
                                                                                               र्
                                                                                                                                      밁
                                                                                                                                                               S
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                            ş
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ; TYPE: DNA
; ORGANISM: Human
US-10-027-632-24921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 44
US-10-027-632-24921/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Wang, David G.
TITLE OF INVENTION: Identification and Mapping of Single Nucleotide
TITLE OF INVENTION: Polymorphisms in the Human Genome
                                                                                                                                                                                                                                                                                                                                                                                                                   Best Loc
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 24921, Application US/10027632 Publication No. US20030204075A9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 1999-08-09
NUMBER OF SEQ ID NOS: 325720
SOFTWARE: PastSEQ for Windows Version 4.0
SEQ ID NO 24921
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
hes 641; Conserv
                                                                                                                                                                        4569
                                                                                                                                                                                                                                             4509
                                                                                                                                                                                                                                                                                                              4449
                                                                                                                                                                                                                                                                                                                                               4929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4989 GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 5031
                                  4689
                                                                                                                                      463
                                                                                                                                                                                                          523
                                                                                                                                                                                                                                                                               583
                                                                    403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            43
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             803
                                                                                                                                                                                                                            CAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA 4568
                                                                                                                                                             GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAAGCAGTAGCTCCTTGCTAACGATGT 4628
                                  CATGGTCCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGT 474
                                                                                                                                                                                                          CAGTAGTTTTTGATGTTATGTACACACACACCAAATGTGTAACAGTTCACCACTTCCAGA
                                                                                                                                                                                                                                                                             ATTTGAGTTAGTTTTAGATATACATTGAAATCTTTAATCAGACATTCTCAAGTTTCACA
                                                                                                                                                                                                                                                                                                 ATTTGAGTTAGTTTTTAGATATACATTGAAATCTTTTAATCAGACATTCTCAAGTTTTCACA 4508
                                                                                     TTCAGGAGGTTTGGGGCACTTGGTTTTAATGAGCTTCTGTCATTTAGGGCTTCTCTTGGC 4688
                                                                                                                                      GTGTGGTCATGCCCAAAACATGTTTAAGAAAGGAAAGCAGTAGCTCCTTGCTAACGATGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GATGGAMAGACTGTMAATGTTTAATATGAATATAGTGTTCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 44
                                                                                                                                                                                                                                                                                                                                                                                                                   9.9%;
llarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                  Score 541; DB 17; Length 803; Pred. No. 2.8e-278; 0; Mismatches 2; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    104
284
                                                                   344
                                                                                                                                      404
                                                                                                                                                                                                          464
                                                                                                                                                                                                                                                                             524
                                                                                                                                                                                                                                                                                                                                                584
                                                                                                                                                                                                                                                                                                                                                                                   4448
                                                                                                                                                                                                                                                                                                                                                                                                                   0
밁
                         Ş
                                                                 밁
                                                                                               S
                                                                                                                                      밁
                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
```

```
APPLICANT: MONABARI, JOHN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOWEL GENES,
TILE REFERENCE: MRI-007BCN
CURRENT FAPPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-07-18
PRIOR PRILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOPTWARE: FASESEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                             US-10-357-930-43560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-357-930-43560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: FastSEQ
SEQ ID NO 43560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION
                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                            Query Match 7.9%;
Best Local Similarity 100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 43560, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John
                                                                                                                                                                                                                                                                                                                                                                                         TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                              LENGTH: 518
                                                                                                                                        4235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4929
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4869
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4809
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4749
                                              4295
                                                                                                                                                                                                              4175 AAGTGTCGCTAGTTGCTGCCTCGTATCTCAGGTTTTTTCTCTGTTTTTTGAGAAATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    4989 GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 5031
                                                                                                                                                                                                                                                                                431;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         283
                                                                                          73
                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         43
                          GATATGACTCAACACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTA 4354
                                                                                                               TITTTTGACCAGGATGTGACTTCATGTTTCCTATGGTGACTTCTAAAACCAGCACAGAAT 4294
                                                                                                                                                                                    AAGTGTCGCTAGTTGCTCGCTATCTCAGGTTTTTCTCTGTTTTTGAGAAATGGACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA 4988
GATATGACTCAACAGACCGACTTGGTTATGGGGATGATGAGCCGCACAGACCTCACTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCAAAACTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCATGTAATTGGGGAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GATGGAAAGACTGTAAATGTTTAATATGAATATAGTGTTCTTT 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCATGTAATTGGGGAAACCCTCGYKTCTACTAGGGGTGATACAGATGGTGATTTTAAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCACTAGTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTC
                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                           7.9%; Score 431; DB 18; 1
100.0%; Pred. No. 2.6e-219;
ive 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                          Length 518
                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THERAPY OF
                                                                                                                                                                                                                                                                                Gaps
                                                                                            132
                                                                                                                                                                                                                                  4234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              4928
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4808
                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4868
```

```
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FASESEQ for Windows Version 4.
SEQ ID NO 10717
LENGTH: 425
TYPE: DNA
ORGANISN: Homo sapiens
US-10-357-930-10717
     片
                                 Ś
                                                                        밁
                                                                                                    Ś
                                                                                                                                             밁
                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 46
US-10-357-930-10717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR PRIOR APPLICATION NUMBER: 60/189,862
PRIOR FILING DATE: 2000-03-16
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-06-09
PRIOR PRIOR PRIOR PRIOR NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                             Query Match 7.6%; Score 416; DB 18; I Best Local Similarity 100.0%; Pred. No. 2.8e-211; Matches 416; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 10717, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
DBDIOD ADDITORTING NUMBER: 2003-02-04
DBDIOD ADDITORTING NUMBER: 2003-02-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4595 AGAAAGGAAAG 4605
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               193
                            TACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAA 1433
                                                                                         TGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACAT
TACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAA
                                                                   CACACCAAATGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTA 4594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGAAATCTTTAATCAGACATTCTCAAGTTTTCACACAGTAGTTTTTGATGTTATGTACACA 4534
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGAAATCTTTAATCAGACATTCTCAAGTTTCACACAGTAGTTTTTGATGTTATGTACACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CACACCAAATGTGTAACAGTTCACCACTTCCAGAGTGTGGTCATGCCCAAAACATGTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTTGTGCACAAATAATGTGCTATGATGGGGTGTAAAGTGAAGGCAGAAGAGGGTCAGCCG
                                                                                                                                                                                                                                               Length 425;
                                                                                                                                                                                                             Indels
                                                                                                                                                                                                             0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FOR
THERAPY OF
                                                                                                      1373
                                                                   305
                                                                                                                                          365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           252
                                                                                                                                                                                                           0
                            Ś
                                                                                               Ş
                                                                                                                                      밁
                                                                 밁
                                                                                                                                                                      Ś
                                                                                                                                                                                                           吊
                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 47
US-10-357-930-31909/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                        407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1494
                                                                                                                                                                                                             467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          64
```

```
GENERAL INFORMATION:
APPLICANT: Schlegel, Wilson
APPLICANT: Endege, Wilson
APPLICANT: MORAHAN, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOWEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILTE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-17-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255
PRIOR APPLICATION NUMBER: 60/255
PRIOR APPLICATION NUMBER: 60/255
PRIOR APPLICATION NUMBER: 60/255
PRIOR APPLICATION NUMBER: 60/219
PRIOR APPLICATION NUMBER: 60/255
PRIOR APP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; ORGANISM: Homo sapiens
US-10-357-930-31909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 31909, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity 100.0%; tes 414; Conservative (
                                                                                                                                                                                                                            1376 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1256 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA 1315
                                                       ACCAGACTGGAGCATCAGGGCCAAAGAGAGAAACTCAAGCTGCTGCACCTGGAGAAGCCAA 1495
                                                                                                                                                                                                                                                                                                                                                    ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGTGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTAC 1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCCGTGCATCCCGCCAG 1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAATGAACCTGTCCCTGCTGCTCAGAGGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCC 1553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GAACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAAGCC 1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTCC 125
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAG 65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.6%; Score 414; DB 18; ]
00.0%; Pred. No. 3.4e-210;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             °.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length 467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                    348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   408
    228
                                                                                                                                                                          288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 185
```

```
PRIOR FILING DATE: 2000-12-13
; NUMBER OF SEQ ID NOS: 62232
; SOFTMARE: FASTSEQ for Windows Version 4.
; SEQ ID NO 40868
; LENGTH: 467
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-40868
B. 중
                                                                        밁
                                                                                                             8
                                                                                                                                         문
                                                                                                                                                                                 S
                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR PILLING DATE: 2003-02-16
PRIOR PILLING DATE: 2000-02-16
PRIOR FILLING DATE: 2000-02-17
PRIOR PILLING DATE: 2000-03-16
PRIOR PILLING DATE: 2000-03-16
PRIOR PILLING DATE: 2000-03-16
PRIOR PILLING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR PILLING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILLING DATE: 2000-06-09
PRIOR PILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILLING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 48
US-10-357-930-40868/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               음 중
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 40868, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
                                                                                                                                                                                                                                                                                                                                                                                     Query Match 7.6%; Score 414; DB 18; Length 467; Best Local Similarity 100.0%; Pred. No. 3.4e-210; Matches 414; Conservative 0; Mismatches 0; Indels
                                                                                                                                                                                           1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1556
                                      1496
                                                                                                                                                                                                                                                      347
                                                                                                                                                                                                                                                                                                             467
                                                                                                                                                                                                                                  407
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    107
                                                                                                                                                                                                                                                                                                                                     TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA 1315
                                                                                               ACCAGACTGGAGCATCAGGGCCAAAGAGACAAACCTCAAGCTGCTGCACCTGGAGAAAGCCAA 1495
                                                                                                                                                                           CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                                                             TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTAC 1669
                                    ATGAACCTGTCCCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC 1555
                                                                                                                                                   CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                  CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGGCCAGCG 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAAGCGAGAACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                                                348
                                                                                                                                                     288
                                                                                                                                                                                                                                                                                                             408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1555
                                                                          228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-06-09
PRIOR PPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.
SEQ ID NO 41017
                                S
                                                                        밁
                                                                                                           Ś
                                                                                                                                                   밁
                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 49
US-10-357-930-41017/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
Matches 414; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 41017, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH:
                                                                                                               1496
                                                                                                                                                                                           1436
                                                                                                                                                                                                                                                                                                                                                   1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1616
                                                                                                                                                                                                                                                                                                                                                                                                                              1256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1556
                                                                                                                                                                                                                                                                                                           407
                                                                          227
                                                                                                                                                     287
                                                                                                                                                                                                                                  347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          467
```

```
GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

ITITE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR FILING DATE: 2000-02-17

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319
                                                                                                                                                                                                                                                                                                                                                                                                                   1376 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA 1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           467 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCA
                                                           CCTGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCAGCG 1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTCTAGTGCACTGTTTAGCTGGGATCTCCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTAC 1669
                                                                                                                                                         ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                           ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA 1495
                                                                                                                                                                                                                                                                                                                                                                                 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGA
                                                                                                                                                                                                                                                   ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7.6%; Score 414; DB 18; ilarity 100.0%; Pred. No. 3.4e-210; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 467;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       THERAPY OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1315
                                                                                                                                                                                       1555
                                                                                                                                                                                                                                                   228
                                                                                                                                                                                                                                                                                                                                                                                 288
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1615
108
                                                                                                                       168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           108
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
RESULT 50
US-10-220-891-86/c
; Sequence 86, Application US/10220891
; Publication No. US20030207286A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: NAKAGAWARA, AKIRA
APPLICANT: NAKAGAWARA,
TITLE OF INVENTION: NUCLEIC ACID SEQUENCES HAVING CHARACTERITICS OF ENHANCED
TITLE OF INVENTION: EXPRESSION IN HUMAN NEUROBLASTOMA WITH FAVORABLE PROGNOS
TITLE OF INVENTION: BASED ON COMPARISON BETWEEN HUMAN NEUROBLASTOMA WITH FAV
TITLE OF INVENTION: BASED ON COMPARISON BETWEEN HUMAN NEUROBLASTOMA WITH UNFAVORABLE PROGN
FILE REFERENCE: 7388-73435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: PatentIn version 3.2
SEQ ID NO 86
LENGTH: 789
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LOCATION: (2)..(3)
OTHER INFORMATION: a, t, c
FEATURE:
NAME/KEY: modified base
LOCATION: (5)..(5)
OTHER INFORMATION: a, t, c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/220,891
CURRENT FILING DATE: 2003-03-07
PRIOR APPLICATION NUMBER: JP 2000/140387
PRIOR FILING DATE: 2000-05-12
PRIOR APPLICATION NUMBER: JP 2000/159195
PRIOR APPLICATION NUMBER: JP 2000/159195
PRIOR FILING DATE: 2000-03-07
NUMBER: JP 2000/159195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NUMBER OF SEQ ID NOS: 108
                                                                                                                                                                                                                                                           NAME/KEY: modified base LOCATION: (201)..(201) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                         FEATURE:
NAME/KEY: modified base
LOCATION: (46)...(46)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME/KEY: modified base LOCATION: (8)..(12)
OTHER INFORMATION: a, t,
FEATURE:
NAME/KEY: modified base
LOCATION: (664)..(664)
OTHER INFORMATION: a, t,
                                                                                                                                                                                           LOCATION: (595)..(595)
OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                          FEATURE: modified base LOCATION: (35)..(35)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FEATURE:
NAME/KEY: modified_base
LOCATION: (2)..(3)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
                                                                 OTHER INFORMATION:
                                                                               NAME/KEY: modified base LOCATION: (657)..(657)
                                                                                                                              OTHER INFORMATION: a, t,
                                                                                                                                               NAME/KEY: modified_base LOCATION: (633)..(633)
                                                                                                                                                                                                               NAME/KEY: modified_base LOCATION: (595)..(595)
                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                              OTHER
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: modified base LOCATION: (32)..(32)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                         INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    107
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTAC 1669
                                                              a, t,
 a, t,
ú
                                                              ú
                                                                                                                              Ç
                                                                                                                                                                                              ç
                                                                                                                                                                                                                                                              ņ
                                                                                                                                                                                                                                                                                                                            ņ
                                                                                                                                                                                                                                                                                                                                                                                            ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ú
á
                                                              á
                                                                                                                              ģ
                                                                                                                                                                                              á
                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                unknown
                                                                                                                                                                                                unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         unknown
 unknown
                                                                unknown
                                                                                                                                                                                                                                                                unknown
                                                                                                                                                                                                                                                                                                                              unknown
                                                                                                                                                                                                                                                                                                                                                                                              unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           unknown
                                                                မ္ပ
                                                                                                                                ဝူ
                                                                                                                                                                                              ဝင္ပ
                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                              ဝ္ဂ
                                                                                                                                                                                                                                                                                                                                                                                              ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                            ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           유
                                                                other
                                                                                                                                                                                                                                                                                                                              other
                                                                                                                                                                                                                                                                                                                                                                                                                                                            other
                                                                                                                                                                                                                                                                                                                                                                                              other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PROGNOSIS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FAVORABLE
```

```
δ
                 δ
                                             밁
                                                                Ş
                                                                                                                Ş
                                                                                                                                            밁
                                                                                                                                                                                            밁
                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                Š
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-220-891-86
                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Simi
Matches 453;
                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE: modified base LOCATION: (783)...(783)
                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified_base LOCATION: (766)...(766) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: modified base LOCATION: (710)..(710) OTHER INFORMATION: a, t.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: modified_base
LOCATION: (697)..(697)
OTHER INFORMATION: a, t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified base LOCATION: (693)..(693) OTHER INFORMATION: a, t,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: modified base LOCATION: (666)..(666) OTHER INFORMATION: a, t, FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: modified base LOCATION: (695)..(695) OTHER INFORMATION: a, t,
                     5115
                                                                      5055
                                                                                                                       4995
                                                                                                                                                                      4935
                                                                                                                                                                                                                    4875
                                                                                                                                                                                                                                                                  4815
                                                                                                                                                                                                                                                                                                                    4755
                                                                                                                                                                                                                                                                                                                                                                    4695
                                              144
                                                                                                                                                                                              324
                                                                                                                                                                                                                                             384
                                                                                                                                                                                                                                                                                           444
                                                                                               204
                                                                                                                                             264
                                                                                                                                                                                                                                                                                                                                            504
84
                                                                                                                                                                                                                                                                                                                                                                                                      Similarity
                                                                                                                                                                                                                                                                                                                                            CCCCTTCCTTCTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTA
                                                            AAGACTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAGCTGTTGAAC 5054
                                                                                                                                                             CTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGA 4994
                                                                                                                                                                                                                                                                                             GTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTCGGAGGC 385
                                                                                                                                                                                                                                                                                                                                                                CCCCTTCCTTGGAACTGTGATGTAGTCACATCCTACAGCCTTTAGTGCTGGTTCACTA
                     ATAAAATCAAAACTGGTACCTGTTTATACATAAA 5148
                                                CTAGACTTCTATGTGAGAAGTGCTGGAAAATGATTTAGGACATGTGTAAAGTTAGATGGA
                                                                                                                                                                                            AATTGGGGAAACCCTCGCGTCTACTAGGGGGTGATACAGATGGTGATTTTAAAGAGCAAAA
                                                                                                                                                                                                          AATTGGGGAAAACCCTCGCGTCTACTAGGGGTGATACAGATGGTGATTTTAAAGAGCAAAA 4934
                                                                                                                                                                                                                                             GTGTCAGATAATCAGTTCTTGGAATCGAGACTGCCGTGGCGAAGGGGTGGCCTCGGAGGC
                                                                                             AAGNCTGTAAATGTTTAATATGAATATAGTGTTCTTTTGAAGTAAGGCCAGCTGTTGAAC 145
                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                     7.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ŗ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ģ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                                                                                                                                                                                                                                                                         Score 403; DB 17;
Pred. No. 2.7e-204;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                                       ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      မ္
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    or other
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   other
51
                                                                                                                                                                                                                                                                                                                                                                                                                Length 789;
                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
```

4754

0

4814 445

205

85

265

325 4874

Search completed: February Job time : 2782 secs 15, 2005, 22:17:30

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein - protein search, using sw model
Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09E_PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*

20: /cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109
3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        February 9, 2005, 12:09:54; Search time 125.848 Seconds (without alignments) 1721.062 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1373511 segs, 325702437 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1373511
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	89	ID	Description
1	3406	99.6	665	ا و	US-09-816-494-2	Sequence 2, Appli
N	3406	99.6	665	9	US-09-964-277-2	
ω	3406	99.6	665	15	US-10-377-072-26	Sequence 26, App
4	3406	99.6	665	15	US-10-072-012-680	
տ	3406	99.6	665	15	US-10-168-506-14	
თ	3406	99.6	665	15	US-10-343-357-7	
7	3406	99.6	665	15	US-10-257-026-2	N
8	3406	99.6	665	16	US-10-648-593-240	240
9	3406	99.6	665	16	US-10-648-593-247	247
10	3406	99.6	665	16	US-10-377-072-26	
11	3406	99.6	690	15	US-10-072-012-679	679
12	3406	99.6	690	15	US-10-072-012-703	
13	3406	99.6	690	,	110-10-405-114-54004	

																											,	٥	AT 1	· ~	
4 5	44	43	42	41	40	39	38	37	36	35	34	33	32	3	30	29	28	27	26	25	24	23	22	21	20	19	18	þ	16	15	14
453	453	453	466.5	469	469	469	469	566	619	619	654.5	654.5	654.5	654.5	654.5	654.5	732.5	807	917	1075.5	1297	1302	1326	2500	2721.5	2930	3079.5	3358.5	3379.5	3399	3399
13.3	13.3	13.3	13.6	13.7	13.7	13.7	13.7	16.6	18.1	18.1	19.1	19.1	19.1	19.1	19.1	19.1	21.4	23.6	26.8	31.5	37.9	38.1	38.8	73.1	79.6	85.7	90.1	98.3	98.9	99.4	99.4
394	394	394	381	482	482	482	444	140	155	155	170	170	170	170	170	169	461	155	501	616	253	663	625	517	677	672	660	680	662	665	665
φ.	φ	9	14	16	15	14	9	17	9	9	15	14	14	9	9	14	15	9	15	15	15	15	15	9	15	15	15	15	15	15	15
US-09-849-626-805	US-09-902-941-805	US-09-736-457-805	US-10-184-832-2	US-10-648-593-164	US-10-058-270A-130	US-10-346-356-2	US-09-964-899-47	US-10-803-738-12	US-09-955-732-6	US-09-964-277-6	US-10-655-073-16	US-10-405-808-16	US-10-314-058-14	US-09-847-519A-11	US-09-775-925-26	US-10-346-356-15	US-10-072-012-701	US-09-964-277-7	US-10-072-012-702	US-10-072-012-266	US-10-108-260A-4872	US-10-072-012-700	US-10-072-012-699	US-09-964-277-21	US-10-072-012-683	US-10-296-115-1259	US-10-072-012-682	US-10-072-012-256	US-10-072-012-258	US-10-072-012-681	US-10-094-749-2312
805,	208	805	2, 7	16	130,	Sequence 2, Appli	Sequence 47, Appl	e 12	6	6	16,	16,	e 14	11,			Sequence 701, App		702,		4872	Sequence 700, App	Sequence 699, App	21, 🌶	683,	1259	682,	256,	258,	681, /	Sequence 2312, Ap

ALIGNMENTS

```
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
FRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 665
                              Ş
                                                                             밁
                                                                                                                 Ş
                                                                                                                                                              뭉
                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                           ; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 1
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
                                                                                                                                                                                                                                         Query Match
Best Local Similarity
Matches 663; Conserv
121
                                      121
                                                                                 13
                                                                                                         61 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL 120
                                                                                                                                                                                 1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ 60
                       LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                             DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
LAGGFAEFSRCFPGLCEGKSTLVPTCISOPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                              MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                 99.6%;
                                                                                                                                                                                                                                           Score 3406; DB 9; Length 665;
Pred. No. 9e-238;
1; Mismatches 1; Indels
                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                             Gaps
                                      180
                                                                               120
                                                                                                                                                                60
```

```
Sequence 2, Application US/09964277

Patent No. US20020137170A1

GENERAL INFORMATION:
APPLICANT: Wei, Bo
ITILE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERIOR: 200125, 434

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT APPLICATION NUMBER: US/09/964,277

CURRENT FILING DATE: 2001-09-25

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665

TYPE: PRT
ORGANISM: Homo Sapiens
                                                                                                   $
                                                                                                                                                 밁
                                                                                                                                                                                      Ś
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 2
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                      Query Match
Best Local Sim:
Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                      121
                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661
                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                             ш
                                                                                                                                                                                                                                                                  \vdash
                                                                                                                                                                                                                                                                                                                          Similarity
                                                                                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                               DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |||||
||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNPNF1GQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                    99.6%;
ilarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                    Score 3406; DB 9
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                         9
                                                                                                                                                                                                                                                                                                    ۲.
                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                         665;
                                                                                                                                                                                                                                                                                                  0
                                                            180
                                                                                                                                                                           120
                                                                                                                                      120
                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                               0
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLE
TITLE
TI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Ir
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Gluckemann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 3
US-10-377-072-26
US-10-377-072-26
Sequence 26, Application US/10377072
Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDILAPQTSTFSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSPLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665
```

660 600 540 540 480 480

420 420

360 360 300 300 240 240

MOLECULES

```
; PRIOR APPLICATION NUMBER: US 09/816,494
; PRIOR FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 09/815,419
; PRIOR PILING DATE: 2001-03-22
; Remaining Prior Application data removed - S
; NUMBER OF SEQ ID NOS: 114
; SOFTWARE: PastSEQ for Windows Version 4.0
; SEQ ID NO 26
; ERQ ID NO 26
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                        RESULT 4
US-10-072-012-680
                                                                                                                                                         S
                                                                                                                                                                                            밁
                                                                                                                                                                                                              5
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
Sequence 680, Application US/10072012
Publication No. US20040033493A1
GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 99.7
Matches 663; Conservative
                                                                                                                                                               661
                                                                                                                                                                                              109
                                                                                                                                                                                                                         601
                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                                                                                                                                                  361
                                                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         μ
                                                                                                                                                             IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAHEMIGTQI VTERLVALLESGTEKVLLI DSR PFVE YNTSHI LEAINI NCSKLMKRRLQQ
                                                                                                                                   IIEVS
                                                                                                                                                                                              QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                              QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                      SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                       SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                   SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                     SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                               PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                   665
                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                File Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                              660
                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
```

```
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Rieger, Daniel K.
APPLICANT: Rieger, Daniel K.
APPLICANT: Rieger, Daniel K.
APPLICANT: Rieges, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same Price Reference: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,512
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,406
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
                                    δ
                                                                                        밁
                                                                                                                            Ś
                                                                                                                                                                            밁
                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Remaining Prior Application data
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 680
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                    Best Local Sin Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                             181
    181
                                                                                          121
                                                                                                                                   121
                                                                                                                                                                              61
                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                             \vdash
                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                             QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                sapiens
                                                                                                                                                                                                                                                                                                                                                                      99.6%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           David
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Σ
                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                    Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                                                                                                                 1;
                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Same
                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PALM
                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                          180
                                                                                                                                   180
      240
                                             240
                                                                                                                                                                              120
                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                      0
```

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MHYTE, DAVID
APPLICANT: MANNING, GERARD
APPLICANT: MANNING, GERARD
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MANWALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: PCT/US00/34736
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR APPLICATION VET. 2.1
SEQ ID NO 14
SEQ ID NO 14
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
US-10-168-506-14
         Ş
                                                             Ś
                                     뮍
                                                                                           밁
                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 5
US-10-168-506-14
US-10-168-506-14
, Sequence 14, Application US/10168506
, Publication No. US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      В
                                                                                                                                               Query Match 99.6
Best Local Similarity 99.7
Matches 663; Conservative
         121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         601
                                    61
                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                          \vdash
                                                                                                                     \vdash
                                             DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASISSDCFLTVLLGKLEKSFNSVHL 120
LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                              DKYLITELIQHSAKHKYDIDCSQKYVYYDQSSQDYASLSSDCFLTYLLGKLEKSFNSVHL
                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPEVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                      MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   OKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKGAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASIHGF 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LVHCLAGISRSATIAIAYIMKRWDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                            99.6%;
99.7%;
                                                                                                                                                            Score 3406; DB 15;
Pred. No. 9e-238;
                                                                                                                                                Mismatches
                                                                                                                                               1;
                                                                                                                                                                          Length
                                                                                                                                               Indels
                                                                                                                                             0
                              120
                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
```

```
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUWAR, Jayalaxmi
APPLICANT: WAO, Monique G.; BURFORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: YUE, Henry; WARREN, Bridget A.
APPLICANT: WOUYEN, Danniel B.; CHAWLA, Narinder K.
APPLICANT: KEARNEY, Liam
APPLICANT: KEARNEY, Liam
TITLE OF INVENTION: PROTEIN PHOSPHATASES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, II
APPLICANT: ELLIOTT, Vicki S.
APPLICANT: YAO, Monique G.; I
APPLICANT: WANG, Yumei E.; S'
APPLICANT: GANDHI, Ameena A.
APPLICANT: LEE, Ernestine A.
APPLICANT: LEE, Ernestine A.
APPLICANT: LU, Dyung Aina M.
                                                                         FILE REFERENCE: PI-0173 PCT
CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: PCT/US01/23716
PRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2000-07-28
PRIOR FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-10
PRIOR PILING DATE: 2000-08-18
PRIOR FILING DATE: 2000-08-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 6
US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 7, Application US/10343357
Publication No. US20040058341A1
OR APPLICATION NUMBER: US 60/223,272
OR FILING DATE: 2000-08-03
OR PILING DATE: 2000-08-09
OR FILING DATE: 2000-08-10
OR APPLICATION NUMBER: US 60/226,728
OR APPLICATION NUMBER: US 60/226,728
OR FILING DATE: 2000-08-18
OR APPLICATION NUMBER: US 60/229,254
OR APPLICATION NUMBER: US 60/231,366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181 QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121 LAGGEABESRCEPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QTGASGPKSKLKLLHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
```

```
RESULT 7

US-10-257-026-2

US-10-257-026-2

Sequence 2, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:

APPLICANT: Merck Patent GmbH

TITLE OF INVENTION: New dual specifi

FILE REFERENCE: DUSP10KDWS
                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                   중 유
                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; PRIOR PILING DATE: 2000-09-0
; NUMBER OF SEQ ID NOS: 20
; SOPTWARE: PERL Program
; SEQ ID NO 7
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
; PRATURE:
; PRATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte II
US-10-343-357-7
                                                                                                                           밁
                                                                                                                                                                                                                중 음
                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local &
Matches 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Similarity
                                                                                                                                                                        601
                                                                                                                                                                                              541
                                                                                                                                661
                                                                                                                                                      601
                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                          481
                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                            661
                                                                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۳
                                                                                                             IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IIEVS
                                                                                                                                                                 QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                      SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                   SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                     QTGASGPKSK1K1LH1EKPNEPVPAVSEGGQKSETPLSPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                               LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                           QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LAGGFAEFSRCFPGLCEGKSTLVFTCISQPCLFVANIGFTRILFNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                          PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                          QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                               PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                             665
                                                                                                                                 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ħ
              specificity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; Score 3406; D;
; Pred. No. 9e-2
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ŏ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US20040058341A1 7480570CD1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3406; DB 1
No. 9e-238;
             phosphatase
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                                                                                                                                                600
                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                             540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                      660
                                                                                                                                                                          660
                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                     RESULT 8
US-10-648-593-240
                                                                                                                                 유
                                                                                                                                                                   В
                                                                                                                                                                                          Ś
                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                $
Sequence 240, Application US/10648593
Publication No. US20040106132A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/O
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/O
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
```

```
; TYPE: PRT
; ORGANISM: Homo
US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/10/257, CURRENT FILING DATE: 2003-11-07 NUMBER OF SEQ ID NOS: 3 SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 2 LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.6%;
Best Local Similarity 99.7%;
Matches 663; Conservative
                 661
                                          601
                                                                601
                                                                                        541
                                                                                                                                    481
                                                                                                                                                          481
                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                          301
661
                                                                                                             541
                                                                                                                                                                                 421
                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                    181
                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
          SABII
                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                      SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                               IIEVS
                                          QKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                          QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                     SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                   QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
665
                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gaps
                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                     180
                                            660
                                                                                        600
                                                                                                             600
                                                                                                                                    540
                                                                                                                                                          540
                                                                                                                                                                                 480
                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                    420
                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
```

AND/OR IAHI

```
RESULT 9
US-10-648-593-247
                                                                                                                                                                   S
                                                                                                                                                                                              뮹
                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: PatentIn version 3.2
SEQ ID NO 240
LENGTH: 665
                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo
US-10-648-593-240
 Sequence 247, Application US/10648593
Publication No. US20040106132A1
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
Matches 663; Conserv
                                                                                                                                                                          661
                                                                                                                                                                                                      601
                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                 481
                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                             361
                                                                                                                                                                                                                                                                                                                                                                                                                                                       361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         \vdash
                                                                                                                                                                          IIEVS
                                                                                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSRBELGKVGSQSSFSGSME
                                                                                                                                                                                                   QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                      SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                       SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                             KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                   SSSEDALEYYKPSTTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                   SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                         PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QQNGIGYVLNASYTCFKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  99.6%;
nilarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           .GYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILFWLDKSVDFIEKAKASNGCV
                                                                                                                                                 665
                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 3406; D
Pred. No. 9e-2
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 6; DB 16;
9e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
    ACTIVITY OF COMPOUNDS
TYROSINE KINASES AND/O
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                 600
                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                         600
                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
    OR THAT
RESULT 10
US-10-377-072-26
; Sequence 26, Application US/10377072
; Publication No. US20040157221A9
; GENERAL INFORMATION:
; APPLICANT: Millennium Pharmaceutica:
```

```
; TITLE OF INVENTION: PROTEIN TYROSINE KI;
; FILE REFERENCE: D0273 NP
; CURRENT APPLICATION NUMBER: US/10/648,59;
; CURRENT FILING DATE: 2003-08-26
; PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
; NUMBER OF SEQ ID NOS: 557
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 247
; ELNGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-648-593-247
밁
                      Ś
                                             В
                                                                         Ş
                                                                                                   뫄
                                                                                                                               5
                                                                                                                                                            밁
                                                                                                                                                                                          8
                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                              Вb
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                    B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local S
Matches 663
661
                          661
                                                     601
                                                                               601
                                                                                                           541
                                                                                                                                        541
                                                                                                                                                                    481
                                                                                                                                                                                              481
                                                                                                                                                                                                                          421
                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                361
                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Similarity
                         SASII
                                                                         QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                       SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
IIEVS
                                                     QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREE!
                                                                                                                                  SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                         SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                              PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                       SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                     QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                              PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                     QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSPNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.6%;
nilarity 99.7%;
Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             <u>+</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 3406; DB 1
Pred. No. 9e-238;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                   660
                                                                                                          600
                                                                                                                                     600
                                                                                                                                                                 540
                                                                                                                                                                                           540
                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
```

Pharmaceuticals

```
FILE REFERENCE: MPIO3-0.180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-06-29
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2000-04-25
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
                                                                     밁
                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                          श
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo Sapiens
US-10-377-072-26
                         S
                                                                                                             ફ
                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: T881, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934,
TITLE OF INVENTION: 38692, 46508, 16816
TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICATION NUMBER: US 09/816,494
FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US 60/205,508 FILING DATE: 2000-05-19
                           361
                                                                     301
                                                                                                                 301
                                                                                                                                                             241
                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                  121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                        DKYLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                 QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                           LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                     QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEXILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                          QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                         LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rudolph-Owen, Laura
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          99.6%; Score 3406; DB 16; 99.7%; Pred. No. 9e-238; cive 1; Mismatches ·1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Þ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        15934, 26335, 50365, 21117,
16816, 16839, 49937, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                 360
                                                                                                                                                             300
                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                     360
                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
```

```
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Sample REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 11
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 679, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J
Gusev, Vladimir Y.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SKRIHSVRTSSSGTAQRSILSPIHRSGSVEDNYHTSFIFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/10072012 o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     David W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ٠.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
```

```
RESULT 12
US-10-072-012-703
i Sequence 703, Application US/10072012
publication No. US20040033493A1
GENERAL INFORMATION:
                                                                                                                                                                              S
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                  占
                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; ORGANISM: Homo sapiens
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local S
Matches 663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 679
LENGTH: 690
TYPE: PRT
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
APPLICANT: Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 99.7%;
                                                                                                                                                                                      661
                                                                                                                                                                                                                  626
                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                            566
                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                     506
                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                           446
                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                   386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            \vdash
                                                                                                                                                           IIEVS
                                                                                                                                                                                                                                                                      SDILAPOTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                         SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                      SABIL
                                                                                                                                                                                                                                 QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                       SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                          SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKBKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQNGIGYYLNASYTCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKBLM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKVLITELIOHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                            690
                                                                                                                                                                                      665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 3406; DB 15;
Pred. No. 9.5e-238;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0,
                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                565
                                                                                                                                                                                                                                                                                                                                                           540
                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                         625
                                                                                                                                                                                                                                                                                                                                                                                       505
                                                                                                                                                                                                                 589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   360
                                                                                                                                                                                                                                                                                                                                                                                                                                              445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
```

```
Ś
                                      밁
                                                                        5
                                                                                                                          밁
                                                                                                                                                              S
                                                                                                                                                                                                         뮍
                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
PRIOR PRILING DATE: 2001-02-07
PRIOR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Pat
SEQ ID NO 703
LENGTH: 690
                                                                                                                                                                                                                                                                                                                                                                          Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                             Local Similarity
                                                                                                                            146
      241
                                                                                 181
                                                                                                                                                                   121
                                                                                                                                                                                                           86
                                                                                                                                                                                                                                 61 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                           26
                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PatentIn Ver.
                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                        LAGGFAEFSRCFFGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                       DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Furtak, Katarzyna
Grosse, William M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Wolenc, Adam R.
Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Colman, Steven D. Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Shimkets,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Padigaru,
                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                                                                                                                                                                                                                                                                                                                                                         99.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3
                                                                                                                                                                                                                                                                                                                                                                      Score 3406; DB 15;
Pred. No. 9.5e-238;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ŧ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PALM
                                                                                                                                                                                                                                                                                                                                                                      Gaps
  300
                                                                                 240
                                                                                                                          205
                                                                                                                                                              180
                                                                                                                                                                                                       145
                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                         85
                                                                                                                                                                                                                                                                                                                                                                      0
```

325

```
Sequence 54204, Application US/10425114

Publication No. US20040034888A1

GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128

BEQ ID NO 54204
LENGTH: 690
TYPE: PRT
ORGANISM: Homo sapiens
                                               S
                                                                                       밁
                                                                                                                       ঠ
                                                                                                                                                          밁
                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                             Query Match
Best Local Similarity
Matches 663; Conserv
                                                                                                                                                                                                                                                                                                FEATURE:
OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI.pep:-10-425-114-54204
                     146
                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       266 LVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                       98
                                                                                                                       61
                                                                                                                                                          26
                                                                                                                                                                                            μ
                                    LAGGFAEFSRCFFGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                       DKVLITELIQHSAXHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 OKPSDRADSRRSWHEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             690
                                                                                                                                                                                                                                           99.6%;
99.7%;
                                                                                                                                                                                                                           Score 3406; DB 15;
Pred. No. 9.5e-238;
1; Mismatches 1;
                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                           0,
                                                                                                                                                          85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                685
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    385
                   205
                                                                                       145
                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       325
APPLICANT: HIO, YURI
APPLICANT: OTSUKA, KAORU
APPLICANT: IRIE, RYOTARO
APPLICANT: IRIE, RYOTARO
APPLICANT: TAMECHIKA, ICHIRO
APPLICANT: SEKI, NAOHIKO
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGHARI, KENI
APPLICANT: NAGHARI, KENI
APPLICANT: NAGHARI, KENI
APPLICANT: NASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 50/350,435
PRIOR TILLNG DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PATENTIN Ver: 2.1
SEG ID NO 2312
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2312, Application US/10094749 Publication No. US20030219741A1
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: ISOGAI, APPLICANT: SUGIYA
                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                    SUGIYAMA, TOMOYASU
OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
ISHII, SHIZUKO
YAMAMOTO, JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                           ISONO, YURI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        690
                                                                                                                                                                                                                                                                                                                                                                                                      YUUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAKAO
```

```
RESULT 15
US-10-072-012-681
; Sequence 681, Application US/10072012
; Publication No. US20040033493A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                          뮍
                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Homo sapiens
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 662; Conser
                                                                                                                               APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                            541
                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
Li, Li
Gangolli, Esha
Padigaru, Muralidhara
Padigaru, David W.
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
                                                                                                                                                                                                                                                                              IIEVS
                                                                                                                                                                                                                                                                                                      IIEVS
                                                                                                                                                                                                                                                                                                                                                                                         SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                         SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAVRFVKEKRPTISPNENFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MAHEMIGTQIVTERLVALLESGTEKVLLIDSR PFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                      QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                   QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DKVLITELIQHSAKHKVDIDCSQKVVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LAGGFARFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                                                                                  Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 3399; DB 15;
Pred. No. 2.9e-237;
1; Mismatches 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
片
                                                                    Ş
                                                                                                                       밁
                                                                                                                                                         Ś
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: BUTGESS, Catherine E.
FITTLE OF INVENTION: Proteins and Nucleic Acids Enc.
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILLING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILLING DATE: 2001-02-08
PRIOR FILLING DATE: 2001-02-08
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILLING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SOFTWARE: PatentIn Ver.
SEQ ID NO 681
LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local Simhes 662;
                                      301
                                                                            301
                                                                                                                       241
                                                                                                                                                               241
                                                                                                                                                                                                                                              181
361
                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                             Similarity
                                                                                                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                           QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                             QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                           LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                     QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                      QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Furtak, Katarzyna
Grosse, William M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lepley, Denise M. Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Taupier Jr, Raymond J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               99.4%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score 3399; DB 15;
Pred. No. 2.9e-237;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                         120
420
                                                                            360
                                                                                                                       300
                                                                                                                                                             300
                                                                                                                                                                                                     240
                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
```

421 SSSEDALEYYKPSTTLDGTNKLC	문 4
SSSEDALEYKRSTTLDGTNKLC SSSEDALEYKRSTTLDGTNKLC SSSEDALEYKRSTTLDGTNKLC SSSEDALEYKRSTTLDGTNKLC SKELHSVRTSSGTAQRSLLSPL SKELHSVRTSGTAQRSLLSPL SKELHSVRTSSGTAQRSLLSPL SKELHSVRTSGTAQRSLLSPL SKE	661
SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ 480 \$SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ 480 \$SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ 480 \$KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH 540 \$KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH 540 \$KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH 540 \$KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH 540 \$STILAPQTSTSLTSSWYFATESSHFYSASAIYGGSXYSAYSCSQLPTCGDQVYSVRRR 600 \$BILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR 600 QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSME 660	IIEVS 665

Search completed: February 9, 2005, 12:28:41 Job time : 128.848 secs

This Page Blank (uspto)

```
Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2005, 12:00:17 ; Search time 42.637 Seconds (without alignments) 1164.285 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LGKVGSQSSFSGSMEIIEVS
                                                                   Sequence 9121, Appl Sequence 15, Appl Sequence 17, Appl Sequence 17, Appl Sequence 16, Appl Sequence 1846, Appl Sequence 8046, Appl Sequence 805, App Sequence 807, App Sequence 827, App Sequen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Description
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2, Appli
9121, Ap
 24,
                  Appli
Appli
Appli
, Appl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 2, Application US/09816494

Patent No. 6664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-03002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665

TYPE: PRT

ORGANISM: Homo sapiens
                            밁
                                                                S
                                                                                                           밁
                                                                                                                                    S
                                                                                                                                                                             밁
                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 1
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches 663;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                361
                                     301
                                                                       301
                                                                                                             241
                                                                                                                                             241
                                                                                                                                                                                 181
                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                  LAGGFABESRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILPHLYLGCQRDVLNKELM

OQNGIGYVLNASYTCPKRÆFIDBSHFLRVPVNDSFCBKILPMLDKSVDFIBKAKASNGCV
                                                                                                                                                                                                                                                                                                                             QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                              LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
   PSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGF
                                                                                                             LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                               QQNGIGYYLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDXSVDFIEKAKASNGCV
                                     QTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            12.3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           99.6%;
99.7%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-919-497-60
US-09-949-016-10480
US-09-949-016-10480
US-08-990-379-7
US-08-990-379-4
US-08-990-379-4
US-09-702-705-806
US-09-702-705-806
US-09-614-124B-806
US-09-614-124B-806
US-09-658-824-806
US-09-658-824-806
US-09-658-824-806
US-09-698-90-379-8
US-09-698-804-806
US-09-698-804-806
US-09-698-804-806
US-09-698-804-806
US-09-698-804-806
US-09-589-184-806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Score 3406; DB 4;
Pred. No. 9.9e-288;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence
Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          10840, A
1088, Appli
2, Appli
22, Appl
4, Appli
806, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60,
   420
                                                                       360
                                                                                                                                                                                                                                                                                           180
                                     360
                                                                                                             300
                                                                                                                                                                                 240
                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                     60
```

Result No.

Score

Query Match

Length

멂

SUMMARIES

3406 554.5 654.5 654.5 615.4 619 470.9 470

122.4.4

US-09-816-494-2
US-09-949-016-9121
US-09-544-716-11
US-09-543-57-17
US-09-563-357-17
US-09-519-380-16
US-09-949-016-8486
US-09-949-016-886
US-09-949-016-880
US-09-702-705-805
US-09-714-1248-805
US-09-671-325-805
US-09-689-184-805
US-09-689-184-805
US-09-689-184-805
US-09-689-184-807
US-09-689-184-807
US-09-689-184-827
US-09-688-824-827
US-09-688-824-827
US-09-999-379-5
US-09-999-379-5
US-09-999-379-5
US-09-999-379-5
US-09-999-379-5
US-09-371-6718-11

Database

Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*

2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*

3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*

4: /cgn2_6/ptodata/1/iaa/FCTUS_COMB.pep:*

5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*

6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Minimum DB Maximum DB

seq length: 0
seq length: 2000000000

Total number of hits satisfying chosen parameters:

513545 seqs,

74649064 residues

Title: Perfect score:

US-10-029-345A-109 3418

MAHEMIGTQIVTERLVALLE...

OM protein - protein search, using sw model

Copyright

GenCore version (c) 1993 - 2005

Compugen

February 9,

9::

Scoring table: Sequence:

BLOSUM62 Gapop 10.0 ,

Gapext 0.5

480

514

625

565

413

437

```
Sequence 9121, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION:

ITILE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

ITILE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

PILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-0-08

I PRIOR FILING DATE: 2000-0-0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 2
US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local S
Matches 314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Human
-09-949-016-9121
                                            277
                                                                                                                                         217
                                                                                                                                                             157
                                                                                                                                                                                                                                                            314;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         481
                                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   421
                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                              37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                       MAHEMIGTQIV-TERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQ 59
                                                              CVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRFTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                          QKVTIAELIQPAARSQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVA
                                                                                                                                                                                                                                                                                                                                                        QDKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVH
                                     QVIVHCLAGISRSATIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERSL
                                                                                                                                    LMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSC
                                                                                                                                                                                                                                ILTGGFATFSSCFPGLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QKPSDRADSRRSWHEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREBIGKVGSQSSFSGSME
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SKRIHSVRTSSSGTAQRSILSPIHRSGSVEDNYHTSFIFGISTSQQHITKSAGIGIKGWH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   38.7%; Score 1324; DB 4;
45.1%; Pred. No. 2.4e-106;
tive 93; Mismatches 186;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 661;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                 276
                                                                                                                                                                                                                                216
                                                                                                                                                                                                                                                                             178
                                                                                                                                                                                                                                                                                                                             156
                                                                                                                                                                                                                                                                                                                                                                            119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
RESULT 4
US-09-557-921-15
Sequence 15, Application US/09557921
Sequence 15, Application US/09557921
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPEC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

APPLICANT: Wei, Bo

ITTLE OF INVENTION: DSP-9 DUAL-SPECIFICITY

FILE REFERENCE: 200125.415

CURRENT APPLICATION NUMBER: US/09/544,716

CURRENT FILING DATE: 2000-04-10

NUMBER OF SEQ ID NOS: 20

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 14
                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 3
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14, Application Patent No. 6492157 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH:
                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         626
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        414
                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               170
                                                                                                                                                                                                                                                                                                                                                                                                                                                Н
                                                                                                                                                                                                                                                                           TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNF1GQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                              NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                           GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                             TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MEFEEG-MVEGRARGEELAALGKOASFSGSVEVIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MEFGESIMSENRSR-EELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GAQGAGGVLFAPFGRAGAPGPGGGSDLRRREAARAEPRDARTGWPEEPAPETQFKRRSCQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQ 629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLSAGGEPAPPTPPA---TSALQQGLRGLHLSSDRLQDTNRLKRSFSLDIKSA-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          KNQTGASGPKSKLKLLHLEKPN---EPVPAVSEGGQKSETPLSPPCADSAT--SEAAGQR 353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AARQTPRHGLSALSAPGLPGPGQPAGPGAWAPPLDSP--GTPSPDGPWCFSPE-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             --LSTSQQHLTKSAGLGLKG------WHSDILAPQTSTPSLTSSWYFATESSHFYSA 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAPDARPRPRRPRP-------PAGSPAR---SPAHSLG------LNFGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         KEEASIPKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFG-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AASLHGFSSSEDALEYYKPSTTLDGTN-----KLCQF-SP---VQELSEQTPETSPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PVHPASVPSVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KLLAALQGDPG-----TPSGTPEPPPSPAAGAPLPRLP--PPTSESAATGNAAREG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19.1%; Score 654.5; DB 4 ilarity 72.5%; Pred. No. 5.6e-49; Conservative 27; Mismatches 18
         DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DSP-9 DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09544716
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ----YAPSMRPDGPGPPDPGEAPKLCKLDSPSGAALGLSSPIPD-SPD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length 170;
```

Gaps

120

60

S 밁 S 밁 5 밁 Ś 밁 5

```
S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                        ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo
US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 5
US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                               RESULT 6
US-09-619-380-16
                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-557-921-15
                                                              Sequence 16, Applica Patent No. 6649391 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOPTWARE: FASTSEQ for Windows Version 4.1
SEQ ID NO 15
LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17, Application Patent No. 6645753
                                                                                                                                                                                                                                                                                                                                                                             Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo TITLE OF INVENTION: DSP-11 FILE REFERENCE: 200125.418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.413
FILE REFERENCE: 200125.413
CURRENT FILING DATE: 2000-04-24
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LENGTH: 170
                                                                                                                                                                                                                                                                                                                                                                          Local Similarity 72.5 es 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                            193 YTCPKPDFIPESHFLRVFVNDSFCEKILFWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                              NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    19.1%; Score 654.5; DB 4
72.5%; Pred. No. 5.6e-49;
                                                                                                                                                                                                                                                                                                                                                                          19.1%; Score 654.5; DB 4
72.5%; Pred. No. 5.6e-49;
acive 27; Mismatches 18
                                                                                                  US/09619380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US/09564357
                  DUAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      27;
                  SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                          DB 4;
                                                                                                                                                                                                                                                                                                                                                                           18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        18;
                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                        Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 170;
                                                                                                                                                                                                                                                                                                                                                                           ۲,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1;
                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                             192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                             60
```

```
CURRENT APPLICATION NUMBER: US/09/619,380
CURRENT FILING DATE: 2000-07-19
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 16
SEQ ID NO 16
LENGTH: 170
TYPE: PRT
ORGANISM: Homo Bapiens
US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; LENGTH: 155
; TYPE: PRT
; ORGANISM: Homo &
US-09-955-732A-6
                                                                                                                                      RESULT 8
US-09-949-016-8486
                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
Sequence 8486, Application US/09949016
Patent No. 6812339
GENERAL INFORMATION:
APPLICANT: VERTER, J. Craig et al.
APPLICANT: VERTER, J. Craig et al.
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 29
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 6, Application Patent No. 6825021
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125,433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
                                                                                                                                                                                                                                                                                                                                                                                                                              Local
                                                                                                                                                                                                                               267 LDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                             207
                                                                                                                                                                                                         121
                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                113;
                                                                                                                                                                                                                                                                           13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61 NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                            1 LSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Similarity
                                                                                                                                                                                                                                                                             MRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSATIAIAYIMKTMGMS
                                                                                                                                                                                                                                                                                           LRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMS 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                         SDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19.1%; Score 654.5; DB 4 ilarity 72.5%; Pred. No. 5.6e-49; Conservative 27; Mismatches 18
                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                          18.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US/09955732A
                                                                                                                                                                                                                                                                                                                                                                                                                25;
                                                                                                                                                                                                                                                                                                                                                                                                            Score 619; DB 4
Pred. No. 6e-46;
5; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4; Length 155;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Indels
                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 170;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲.
                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                              0
```

```
; LENGTH: 482
; TYPE: PRT
; ORGANISM: Homo s
US-09-557-921-2
                   Ś
                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 9
US-09-557-921-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Human
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                           SOFTWARE:
SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                     Sequence 2, Application US/09557921
Patent No. 6551810
GENERAL INFORMATION:
                                                                                                                    Matches
                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 8486
LENGTH: 491
                                                                                                                                                                                                                                                                       TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY PHOSPHATASE FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILLING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Luche, Ralf M. APPLICANT: Wei, Bo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: PRT
                                                                                                                               Local Similarity
                                                                                                                    107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        315 SFPVEILPFLYLGCAKDSTNLDVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257
136 CEGKSTLVPTC-ISQPCLPVANIG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  197 TRRCGTDTVVLYDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLH 256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      137
                                                                19 LESGTEKVLLIDSRPFVEYNTSHILEAININGSKLMKRRLQQDKVLITELIQHSA-KHKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                78 DIDC-SQKVVVYDQSSQD-VASLSSDCFLTVLLGKLEKSFNSVHLLAGGFAEFSRCFPGL
                                                VIIDCRPFMEYNKSHIQGAVHINCADKISRRRIQQGKITVLDLISCREGKDSFKRIFSKE 232
                                                                                                                                                                                                                                                            FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EKRPTISPNENFLGQLLDYEKKIKNQTGASGP 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRSVTVTVAYLMQKLNLSMNDAYDIVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      --PTRILPNLYLGCQRDVLNKELIQQNGIGYVLNASYTCPKP-DFIPESHFLRVPVNDSF 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVK 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CE--TNLDGSCSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LELGNERLLIMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRALFTRGEDRDRF 196
                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               13.8%; Score 470.5; DB 4; Length 34.0%; Pred. No. 3.4e-32; ative 63; Mismatches 107; Indels
                                                                                                           13.7%; Score 469; DB 4; Length 482; 35.9%; Pred. No. 4.5e-32; tive 65; Mismatches 96; Indels
                                                                                                               30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                49;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
   밁
                          S
                                                             밁
                                                                                         Ś
                                                                                                                          문
                                                                                                                                                      Ś
                                                                                                                                                                                         밁
                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-702-705-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 10
US-09-702-705-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                               336
                                                                                            300
                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             407
                                                                                                                                                                                                                                                                                                                    97
                                                                                                                                                                                                                                                                                                                                                                                     9
 VHSAPSSLPYL--HSPITTSPS
```

```
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REPERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Best Local Similarity 31.4%;
Matches 120; Conservative 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               NUMBER OF SEQ ID NOS: 1833
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 805, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                  157 FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 233 IIVYDENTNEPSRVMPSQPLHIVLESLKREGKEPLVLKGGLSSFKQNHENLCDNSLQLQE
                                                                                                                                                                                                       VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                           LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                             NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                                                                                                                                                                                                                                                                                IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VDIDCSQKVVVYDQSSQDVASISSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                        ATSCAAEAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG 373
                                                                                                                                                                        VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, Tongtong
Bangur, Chaitanya;
Lodes, Michael A.
Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HCQAGVSRSATIVIAYLMKHTRMTWTDAYKFVKGKRPIISPNLNFMGQLLEFEEDLNN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VLNAS-----YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLV 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          VINVTTHLPLYHYEKGLF----NYKRLPATDSNKQNLRQYFEEAFEFIEEAHQCGKGLLI 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CREVGGGASAASSLLPQPI -- PTTPDIENAELTPILPFLFLGNEQDAQDLDTMQRLNIGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----STLVPTCISQPCLP-VANIGPTRILPNLYLGCQRDVLNKELIQQNGIGY 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; Score 453; DB 4; I; Pred. No. 8e-31; 73; Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOR THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          464
                                                                                                                359
                                                                                                                                                                                                                                                                                              275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 350
```

```
RESULT 12
US-09-614-124B-805
                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                뭉
                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SOFTWARE: FASTSEQ for W:
SEQ ID NO 805
: LENGTH: 394
: TYPE: PRT
: ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-09-736-457-805
                                    GENERAL INFORMATION:
APPLICANT: Wang, Ton;
APPLICANT: Bangur, o
APPLICANT: Lodes, Mi
APPLICANT: Fanger, o
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Wang, To
APPLICANT: Bangur,
APPLICANT: Lodes, M
                                                                                                     Sequence 805, Application US/09614124B Patent No. 6630574
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 805, Application US/09736457 Patent No. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TITLE OF INVENTION: COMPOSITIONS AND METHODS TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                    374
                                                                                                                                                                                                            360
                                                                                                                                                                                                                                      336
                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                          276
                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                           217
                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                                                          135
                                                                                                                                                                                                                                                                                                                                                                                                                                                   97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39
                                                                                                                                                                                                            VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                      VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                          LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMXRRLQQDKVLITELI--QHSAKHK 76
                        Bangur, Chaitan
Lodes, Michael J
Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                    ATSCAREAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                             NQTGASGEKSKLKLLHLEKENEEVPAVSEGGQKSETFLSFFCADSATSEAAGQREVHPAS 359
                                                                                                                                                                                                                                                                                       VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                  IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                              FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                        LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                  LRSGLYSAVIVYDERSPRABSLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Fan, Liqun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative
                                                             Tongtong
ur, Chaitanya S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       13.3%; Score 453; DB 4; Length 394; 31.4%; Pred. No. 8e-31; tive 73; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            134
                                                                                                                                                                                                                                                                                                                                                                    239
                                                                                                                                                                                                                                                                                                                                                                                                                                                  156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      96
                                                                                                                                                                                                                                                                                                                                                                                               216
RESULT 13
US-09-671-325-805
; Sequence 805, App
; Patent No. 666715
                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-614-124B-805
                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Wang, To
APPLICANT: Bangur,
APPLICANT: Lodes, M
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                         336
                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         υ
9
                                                                                                                            COMPOSITIONS AND METHODS DIAGNOSIS OF LUNG CANCER
```

FOR THE THERAPY AND

```
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
ITITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C9
CURRENT APPLICATION NUMBER: US/09/614,124B
CURRENT FILING DATE: 2001-07-11
NUMBER OF SEQ ID NOS: 1668
SOOTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19 LESGTEKVLLIDSRPFVBYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK
                                                                                                                                                                                                                                                                                                                                                                                                 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                              VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                       ATSCAAEAAS-----PSGPL-----GERGKTPATP----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                                                                           NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS 359
                                                                                                                                                                                                                                                                                                                                                                  VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG
                                                                                                                                          VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
Application US/09671325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   13.3%; Score 453; DB 4
31.4%; Pred. No. 8e-31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    73;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            46;
                                                                                                                                                                                                                                                                                                                                                                  335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
```

275 239 216

```
APPLICANT: Mannion, Jane

APPLICANT: Mannion, Jane

TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND

TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER

FILE REFERENCE: 210121.478C8

CURRENT APPLICATION NUMBER: US/09/589,184

CURRENT FILING DATE: 2000-06-05

NUMBER OF SEQ ID NOS: 827

SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 805

LENGTH: 394

TYPE: PRT

ORGANISM: Homo sapiens
        밁
                                         Ś
                                                                                   밁
                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 14
US-09-589-184-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens US-09-671-325-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                        Query Match 13.3%; Score 453; DB 4; Length 394; Best Local Similarity 31.4%; Pred. No. 8e-31; Matches 120; Conservative 73; Mismatches 143; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 805, Application US/09589184 Patent No. 6686447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Matches 120;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                               -09-589-184-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      336 ATSCAAEAAS-----PSGPL---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135 LCEGKSTL------VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
        97
                                   77 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                   39
                                                                                                                    19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 77 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                           Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VPSVPSVQPSLLEDSPLVQALS 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VLVHCQAGISRSATICLAYLMMKKRVRLEBAFBFVKQRRSIISPNFSFMGQLLQFBSQVL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LDALGITALLNVSSDCPN-HFEGHYOYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Wang, Tongtong
Bangur, Chaitanya S.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            13.3%; Score ---,
31.4%; Pred. No. 8e-31;
Active 73; Mismatches 143; Indels 46;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GERGKTPATP----TSQFVFSFPV-SVG 373
                                                                                                                                                            46;
                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                               96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 335
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        96
                                                      ő
                                                                                             밁
                                                                                                                                 Ś
                                                                                                                                                                             밁
                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; TYPE: PRT
; ORGANISM: Homo
US-09-658-824-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Wang, Tongtong
APPLICANT: Bangur, Chaitanya S.
APPLICANT: Lodes, Michael A.
APPLICANT: Fanger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C11
CURRENT APPLICATION NUMBER: US/09/658,824
CURRENT FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-09-658-824-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ίδ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뭐
                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity
Matches 120; Conservat
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 805
LENGTH: 394
                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GENERAL INFO
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 805, Application US/09658824
Patent No. 6746846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 1788
SOFTWARE: FastSEQ for Windows Version
                                                                                                                                       180
                                                                                                                                                                               157
                                                                                                                                                                                                                      135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374 VHSAPSSLPYL--HSPITTSPS 393
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300 NQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135
                                                                                                                                                                                                                                                              97
                                                                                                                                                                                                                                                                                                      77
                                                                                                                                                                                                                                                                                                                                           39
                                                                                                                                                                                                                                                                                                                                                                             19 LESGTEKVLLIDSRPFVEYNTSHILEAININGSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                  LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                  VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                  VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                             VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                               LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                            LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             VLVHCQAGISRSATICLAYLMMKKRVRLEBAFEFVKQRRSIISPNFSFMGQLLQFESQVL
                                                                                                                                     IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                             FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                         LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATSCAAEAAS-----PSGPL----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VESAPSADSTIEDSELAOVIS 381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IQQNGIGYVLNASYTÇPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                    13.3%; ilarity 31.4%; Conservative 7:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                        73;
                                                                                                                                                                                                                                                                                                                                                                                                                  Score 453; DB 4; I
Pred. No. 8e-31;
/3; Mismatches 143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -GERGKTPATP-----TSQFVFSFPV-SVG
                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB 4; Length 394;
```

FOR

THERAPY AND

Indels

46;

Gaps

216

275

Search Job tim	DЪ	Ş	Дb	ş	
Search completed: February 9, 2005, 12:13:08 Job time : 43.637 secs	374 VHSAPSSLPVLHSPITTSPS 393	360 VPSVPSVQPSLLEDSPLVQALS 381	336 ATSCAAEAASPSGPLGERGKTPATPTSQFVFSFPV-SVG 373	VSE	

This Page Blank (uspto)

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Run
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -MODEL-frame+_D2n.model -DEV=xlp
-Q=/Cgn2_1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-Q=/Cgn2_1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=p2n.rni -MINMATCH=0.1 -LOOPCL=0
-DOOPEXT=0^-UNITS=Dits_START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DCCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALICN=15
-MODE=LOCAL_OUTFMT=pto -NORM=ext_-HEAPSIZE=500 -MINLEN=0 -MAXLEN=0200000000
-USER=US10029345_@CGN_1_1_141_@runat_09022005_091208_25808 -NCPU=6 -ICPU=3
-NO_MAAP -LARGEQUERY -MARN_TIMEOUT=30 -THREADS=1 -XGAPEXT=0 -XGAPEXT=0.5 -FGAPOP=6
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Post-processing: Minimum Match 0% Maximum Match 100%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               92:
                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                  3406
3406
1326
1324
799.5
                                                                                                                                                                                                                                         Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                      Issued_Patents_NA:*

1: /cgn2_6/ptodata/
2: /cgn2_6/ptodata/
3: /cgn2_6/ptodata/
4: /cgn2_6/ptodata/
5: /cgn2_6/ptodata/
6: /cgn2_6/ptodata/
                                                                                                                                                                                                                                         Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Xgapop 10.0 , y
Ygapop 10.0 , y
Fgapop 6.0 , y
Delop 6.0 , y
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109
3418
       99.6
99.6
38.8
38.7
23.4
14.0
114.0
113.9
113.7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1202784 seqs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               February 14, 2005, 09:42:14 ; Search time 293.645 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Copyright
                                                                                                                                                                                                                                                                                                                                                                                                  /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                       Length
       1998
3544
2377
2378
23782
2109
2109
2475
2475
333
1830
1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 (c) 1993 - 2005 Compus
                                                                                                                                                                                                                                         DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xgapext
Ygapext
Fgapext
Delext
                  US-09-816-494-3

US-09-816-494-1

US-09-920-668-3

US-09-949-016-3250

US-09-949-016-14952

US-09-016-434-1135

US-09-016-434-1135

US-09-949-016-2615

US-09-949-016-2615

US-09-913-999C-2877

US-09-702-705-803
                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0.5
0.5
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (without alignments)
3705.573 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2405568
                    Sequence
Sequence
Sequence
                                                                         Sequence
                                                                                                           Sequence
Sequence
Sequence
Sequence
Sequence
                                                                                                                                                                                                                                         Description
                                                                                                                                                                                                     Sequence
3, Appli
3, Appli
3, Appli
3250, Ap
11492, Ap
1492, Ap
16, App
2615, Ap
2877, Ap
1803, App
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
```

110 110 110 110 110 110 110 110 110 110	13 14 15
44444 4 6000000000000000000000000000000	ហហហ
116119 1919 1919 1919 1919 1919 1919 19	1238 1238 1238
**************************************	444
-09-658-824-80 -09-702-705-82 -09-736-457-82 -09-671-315-82 -09-589-184-82 -09-589-184-82 -09-671-315-82 -09-671-315-82 -09-671-315-82 -09-671-315-82 -09-689-184-82 -09-689-184-82 -09-689-184-82 -09-689-184-82 -09-689-184-82 -09-689-184-82 -09-689-184-82 -09-919-497-10 -09-919-497-10 -09-919-497-10 -09-919-16-48 -09-919-16-48 -09-919-16-62 -09-919-16-62 -09-949-016-62 -09-949-016-62 -09-949-016-62 -09-949-016-62 -09-949-016-62	9-614-124B- 9-671-325-8 9-589-184-8
equence eq equence equence equence eq equence eq e eq e e e e eq e e e	Sequence 803, App Sequence 803, App Sequence 803, App

ALIGNMENTS

```
ઇ
                                     맑
                                                                         Ś
                                                                                                                 US-10-029-345A-109 (1-665) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                   Score:
                                                                                                                                                                     Query Match:
                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                           US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 3
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 3, Application US/09816494
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                           LENGTH: 1998
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: 10448-030002
21 {\sf SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer} 40
                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                                                     0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                     Gaps:
                                                                                                                                                       00++
```

60 20

; PRIOR FILING DATE: 2000-03-24 ; NUMBER OF SEQ ID NOS: 10 ; SOFTWARE: FastSEQ for Windows Version 4.0	381 SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400	8
; FILE KEFEKENCE: 10448-030002 ; CURRENT EPLICATION NUMBER: US/09/816,494 ; CURRENT FILING DATE: 2001-03-23 ; PRIOR APPLICATION NUMBER: US 60/191,858	361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	4d A
; GENERAL INFORMATION: ; APPLICANT: Meyers, Rachel A. ; TITLE OF INVENTION: 38692 AND 21117, NOVEL DUB ; TITLE OF INVENTION: PHOSPHATASE MOLECULES AND ; TITLE OF INVENTION: PHOSPHATASE MOLECULES AND	341 CysalaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	B 8
	321 GluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrProLeuSerProPro 340	8 8
	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	유 왕
641 AIGSERAFGGLUGIU	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	Db Qy
1861	261 LysargMetAspMetGerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	B 8
1801	241 LeuValHisCygLeuAlaGlyTleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	Ag Ag
1741	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	g d
1681	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	B 8
1	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	B 8
1561	161 ArglieLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	g 49
1501	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	db dy
1441	121 LeuAlaGlyGlyBheAlaGluPheSerArgCyBPheProGlyLeuCyBGluGlyLysSer 140 	B 8
1381	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	Å &
1321	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	B 8
1261	61 ABPLYSVAlLeuIleThrGluLeuIleGlnHisSerAlaLySHisLySValAspIleAsp 80 	p Qy
1201	41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	D Qy
1141	61 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 120	Db

AND USES THEREFOR

```
eLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640
                                                                                                                                                                                                                                                                                                                                                                             JATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA 1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ppIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420
AAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                                                                                oSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu 620
                                                                                                                                                                                                                                                                                                      CTGCAGCCAGCTGCCGACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       rSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              uHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         gLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             rsGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1200
                                   uValser 665
                                                                                                                                                      TAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                             rCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC 1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      uGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                    1920
                                                                                                                                                                                                                             1860
                                                                            1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1260
```

ARATCICCAACCTCCAATTTCGAGCCAACCTCCTGGACCTAACAACAACAACCATTCCTTTCGAGCCAACCAA	2 4	89	2329	2269	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysBroLysBroAspPhe 200 Db 2209 1129 CAGCAGAATGGGATTGGTTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT 1188	521 2149	2089	29	1969	1909	1849	1789	1729	361 1669	9-345A-109 (1-665) x US-09-816-494-1 (1-3544)	tch: 99.70% Mismatches: 1 Qy 341	Length: 3406.00 Matches: 1arity: 99.85% Conservati	TION: (6-494-1	; ORGANISM: Homo sapiens ; FEATURE: Db 1429 ATATCTCCANACTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC ; NAME/KEY: CDS
---	-----	----	------	------	---	-------------	------	----	------	------	------	------	------	-------------	---	----------------------------------	--	----------------	--

375 ACGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGACGCCAGGGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGACGCCAGCGTGCTGGCC 100 SerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHis :::	20 GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr 39	1326.00 Matches: 314	CURRENT FILING DATE: 2001-08-01 NUMBER OF SEQ ID NOS: 49 SEQ ID NO 3 LENGTH: 2377 TYPE: DNA ORGANISM: Homo sapiens FEATURE: NAME/KEY: CDS LOCATION: (135)(2012) S-09-920-668-3 Lignment Scores: 1 386-126 Length: Cores: 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Sequence 3, Application Betent No. 6482644 BENERAL INFORMATION: APPLICANT: Lex M. Cow. APPLICANT: Brett P. I TITLE OF INVENTION: AM FILE REFERENCE: RTS-0; CURRENT APPLICATION NO	4 4 4 6
Q B Q B Q B	Q D Q D Q	B	2	04 70 70 70	40 40 40 40
1350 AGGCGGCCCGACCCCGGGCCCCCGACGCAGGCCCCGAAGCTTG 1409 446SerProValGlnGluLeuSerGluGlnThrProGluThrSerProAsp 461	374 SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 393	1071 CCCTCAGGGAGCCTCGCCCAGTCCTGCCGCGGGGCCCCGCTGCCACGCCTG 1130 336 ProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg 353	259 IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg 278	219 IleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGly 238 :::	

```
APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEF

FILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR FILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOPTWARE: PRASISEQ for Windows Version 4.0

SEQ ID NO 3250

LENGTH: 2351
                 밁
                                           ş
                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                 ; TYPE: DNA
; ORGANISM: Human
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 4
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                US-10-029-345A-109 (1-665)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 3250, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1902
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1683
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1629
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                630
                   109
                                                  μ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCTGGCCAGCCGGCCCCGGGGGCCTGGGCACCGCCGCTTGACTCCCCA-----GGC
                 ATGGCTGGGGACCGGCTCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTG
                                        MetAlaHisGluMetIleGlyThrGlnIleVal---ThrGluArgLeuValAlaLeuLeu 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MetGluPheGlyGluSerIleMetSerGluAsnArgSerArg---GluGluLeuGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgArgSerCysGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACGCCGTCGCCCGACGGGCCCTGGTGCTTCAGCCCCGAG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGAGTTCGAGGAGGGC---ATGGTGGAGGGGCGCGCGCGCGCGAGGAGCTGGCCGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGGACCGGCTGGCCCGAGGAGCCGGCCCCGGAGACGCAGTTCAAGCGCCGCAGCTGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysGlyAspGlnValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAlaIleTyrGlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGGCCCGGCAGACTCCGCGGCACGGCCTCTCGGCCCTGTCGGCGCCCCGGGCTGCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -----LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCCGCGCACAGCCTCGGC-----
                                                                                                                 2.18e-126
1324.00
58.39%
45.05%
38.74%
                                                                                x US-09-949-016-3250
                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TrpHisSerAspIleLeuAlaProGlnThrSer
                                                                                (1-2351)
                                                                                                               2351
314
93
186
104
21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----CTGAACTTCGGCGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1628
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         549
                               밁
                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                             Ś
                                                                                                                            Ś
                                                                                                                                                               밁
                                                                                                                                                                                            S
                                                                                                                                                                                                                                   문
                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                  1045
                                                                                                                                                                                                                                   1009
374
                                                                                                                                                                                                                                                                                                                                                                      688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   409
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         229 TGGCATGTGCTCAGCTCCGTCAACATCTGCTGCTCCAAGCTGGTGAAGCGGCGGCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                           IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHis 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIle
SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 393
                                 GGCCTGAGCGCGGGGGGGGGGCCCCCCCGCGCGCCCCACGCCCCCGGCG-----ACC
                                                                                                                          ProLeuSerProProCysAlaAspSerAlaThr-----SerGluAlaAlaGlyGlnArg 353
                                                                                                                                                               CCTTCAGGGACGCCGAGCCTCCGCCCAGTCCTGCCGGCGGGGCCCCGCTGCCACGGCTG 1104
                                                                                                                                                                                                                                                                                                                   ProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---SerThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC
                                                                ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp 373
                                                                                                                                                                                                  ProAsn-----GluProValProAlaValSerGluGlyGlyGlnLysSerGluThr 335
                                                                                                                                                                                                                                                                                                     CCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCAGCCTG
                                                                                                                                                                                                                                                                                                                                                                      ATCATGAAGACCATGGGCATGTCCTCCGACGACGCCTACAGGTTCGTGAAGGACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                         CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCATCGCCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGCTGCCCTGGCTGGACAAGTCCATCGAGTTCATCGATAAAGCCAAGCTCTCCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGACCCGCATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCAGACAGCTTCCTCCATCCTGCTGAGCAAGCTGGACGGCTGCTTCGACAGCGTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGCCAGGTGGAGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr
                                                                                                                                                                                                                                   AAGCTGCTGGCCGCCCTGCAGGGCGACCCGGGC-----
                                                                                                                                                                                                                                                                  LysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLys 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CGGGGCCGGGCCTGGGCCGCTGGTCATCGACAGCCGCTCCTTCGTGGAGTACAACAGC
                                                                                                 ACC
                                                                                                                                                                                                                                     1044
                                                                                                                                                                                                                                                                                                     1008
                                                                                                                                                                                                                                                                                                                                                                                                       278
                                                                                                                                                                                                                                                                                                                                                                                                                                         888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             70E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      79
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           228
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         288
```

```
RESULT 5
US-09-949-016-14992
                                                                                                                                                                                 밁
                                                                                                                                                                                                       S
                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
GENERAL INFORMATION:
APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
                                                                                               Sequence 14992, Application Patent No. 6812339
                                                                                                                                                                                                                                                1876
                                                                                                                                                                                 1933
                                                                                                                                                                                                                                                                                                             1816
                                                                                                                                                                                                                                                                                                                                                                              1756
                                                                                                                                                                                                                                                                                                                                                                                                                                           1696
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1510
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1210
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1270
                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                             610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    414
                                                                                                                                                                          CTGGGCAAGCAGGCGAGCTTCTCGGGCAGCGTGGAGGTCATCGAGGTGTCC
                                                                                                                                                                                                ValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                       GGCGCACAGGGGGCGGGGTGCTGTTTGCGCCCTTCGGCCGGGGGGCGCCCCGGGA
                                                                                                                                                                                                                                                           MetGluPheGlyGluSerIleMetSerGluAsnArgSerArg---GluGluLeuGlyLys
                                                                                                                                                                                                                                                                                                                              ArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgSerCysGln 629
                                                                                                                                                                                                                                                                                                                                                                          CCAGGCGGCGGCACCTGCGGCGCGCGGAGGCAGCGAGGGCTGAGCCCCGGGACGCG 1815
                                                                                                                                                                                                                                          ATGGAGTTCGAGGAGGGC---ATGGTGGAGGGGCGCGCGCGCGCGAGGAGCTGGCCGCC
                                                                                                                                                                                                                                                                                                           CGGACCGGCTGGCCCGAGGAGCCGCCCGGAGACGCAGTTCAAGCGCCGCAGCTGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                         CysGlyAspGlnValTyrSerValArgArgArgGlnLysProSerAspArgAlaAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAlaIleTyrGlyGlySerAlaSerTyrSerAlaTyrSerCysSerGlnLeuProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GCCGCCCCGATGCGCCCACGGCCCCGCCGGCGCCCCGGCCCC-------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGlnSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAGCCCGTCGGGGGCCGCGCTGGGCCTGTCCTCGCCCATCCCGGAC---AGCCCCGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaAlaSerLeuHisGlyPheSerSerSerGluAspAlaLeuGluTyrTyrLysProSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTGCC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCGCACTGCAGGAGGGCCTGCGCGGGCCTGCACCTCTCCTCCGGACCGCCTGCAGGACACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACGCCGTCGCCCGACGGGCCCTGGTGCTTCAGCCCCGAG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAla 569
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCTGGCCAGCCGGCCCCGGGGGCCTGGGCACCGCCGCTCGACTCCCCA-----GGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCGGCCCGGCAGACTCCGCGCCACGGCCTCTCGGCCCTGTCGGCCCCGGGCTGCCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCCGCGCACAGCCTCGGC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGCGGCCCGACGGCCCCGGGCCCCCCGACCCCGGAGGCCCCGAAGCTCTGCAAGCTG 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrThrLeuAspGlyThrAsn---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----TrpHisSerAspIleLeuAlaProGlnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -SerPro-----ValGlnGluLeuSerGluGlnThrProGluThrSerProAsp
                                                                                                                US/09949016
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---ccceccéécrcccccececec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ASSOCIATED OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----TACGCCCTAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---LysLeuCysGlnPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---------
                                                                                                                                                                             1983
                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                         1875
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1602
                                                                                                                                                                                                                                                                           648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1509
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1440
                                                                                                                                                                                                                                                                                                                                                                                                         609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1485
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 413
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR PPLICATION NUMBER: 60/237,768
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR PILING DATE: 2000-09-08
PRIOR PILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version 4.
SEQ ID NO 14992
PRIOR TANA
               밁
                                        Ś
                                                                          밁
                                                                                                      Ş
                                                                                                                                         문
                                                                                                                                                                   Ś
                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665) x US-09-949-016-14992 (1-13782)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-949-016-14992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DNA
ORGANISM: Human
               9538 GGGACAAATTCCAAGGCTCCCAGGATTCTAAAGGCCCTCCTGACGGCAGGGCAGGAAAAG 959
                                                                                                                                             9418
                                                                                                                                                                                                                                                                                                                                                                                                         9178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9118
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       9058
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8879
                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142 LeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThrArg
                                                                            CAGGGTGCCAGGGTGGACCAGAGAGCCTCCTGGGCCCTCCCCTGGATACACTGGGATCT 9537
                                                                                                                                         ACCAGCCGTGGGTGGGGCCTGCAGTCGGAGGCCAGCCGTGCCCCACCCCCCGCACGGGCC 9477
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTGCTACCCATGAGCCTCTCCCAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys---SerThr 141
                                                                                                                                                                                                          GACGAGGGAAAAAGGGTAAAAGCCACCCACCCAGGCAATCATAAAATTCCTAGGAGCCCACC 9417
                                                                                                                                                                                                                                                                                                                                          GCAGGGCTTGCGGGAGGGCCCGGCAGGGCTCGGGGGAGCGGGGAGCTGGCATGCCAA 9297
                                                                                                                                                                                                                                                                                                                                                                                                         GCATGGGTGGGGGCCCAGGACCCCAGGCTCCCCACCCATGCCCCTGGAAGGACCACA 9237
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GGAGCGGGGGATGAGGGAGGAAAGGAGCTGAAGGCAGTGGATGAGCTGGGTGTGGGAGAA 9177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GTGGAGTTCGGGGGGTGGTCAATGGGAAAGGGGGCAGGAGCTCCAGAAGCAGCTTGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCTGCCTCACCTCTACCTGGGCTCGCAGAAGGACGTCCTAAACAAGGT-GTGTGCA
                                                                                                                                                                                                                                                                         GCTGCGGATGTCACTGGGCCTCTGGCCAGCTCTGAAAGAATCCCCATGTTTTAAAAATGGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.36e-70
799.50
34.53%
27.67%
23.39%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              13782
254
63
154
449
23
                                             178
                                                                                                                                                                          178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     9117
                                                                                                                                                                                                                                                                                                         178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                            178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8938
```

8 8 8 8 8 8 8 8 8 8 8 8 8

밁

rGluGlyGlyGlnLysSerGlu cGcCGGGGGCCCCGCTGCCACGGSerGluAlaAlaGlyGln ::: ::: AGGGAATGCGGCTGCCAGGGAG rValGlnProSerLeuLeuGlu rValGlnProSerLeuLeuGlu cACGCCCCGGCG cACGCCCCCGGCG	10317 CCTGGCCCCGGCGGGCGCCTGGACTGAGCCTCCTCCCCCGCAGGTTCGTGAAGGACAGG 10376 278 ArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLys 297 10377 CGCCCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCAGC 10436 298 IleLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGlu 317 :::	271 271 10197 GGCTGCCCACTTGCACCAGAATGACCCCCACCGTCCAGGACCCCGTGGCAAGGGAGGAGGAGGGC 10256 271	251 SeralaThrIleAlaIleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAla 270	231	231	196 ProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe 215	178 598 CCTCCACCTTCACTCCCGCCCCGAGCTTCTCCCACCCCTTTCCAACCCGCCCTCCCCGCCC 179LeulleGlnGlnAsnGlyIleGlyTyrValLeuAsnalaSerTyrThrCys
Qy 648 LysValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer 665 ::: :::	Db 11184 GGACCAGGCGGCGGCAGCGACCTGCGGCGGAGGCAGGCAG		521 - 10971 G 538 G 11031 G	Qy 481 SerLy8ArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuLeu 500 Db 10917 10937 Db 10917 10937 Qy 501 SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520	Qy 445 PheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460	Qy 413 MetAlaAlaSerLeuHisGlyPheSerSerGluAspAlaLeuGluTyrTyrLy8Pro 432 Db 10743TACGCCCCT 10751 Qy 433 SerThrThrLeuAspGlyThrAsnLy8LeuCy8Gln 444	Db 10638 ACCAGCGCACTGCAGCAGGGCCTGCGGCCTGCACCTCTCGGACCGGCCTGCAGGAC 10697 Qy 393 SerAsnLysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSer 412 Db 10698 ACTAACCGCCTCAAGCGCTCCTTCTCCCTGGACATCAAGTCTGCC 10742

₿.*8*

밁

```
밁
                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-09-016-434-1135 (1-2109)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; CLONE: g1418933
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME: Zeller, Karen J.

REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1135:
SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRANDEDNESS: (ETOPOLOGY: Linea IMMEDIATE SOURCE: LIBRARY: GENBAN CLONE: 91418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM FC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CORRESPONDENCE ADDRESS:
ADDRESSEE: INCYTE PHARMACEUTICALS,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: FILING DATE: HEREW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STREET: 3174 PORTER DRIVE CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CLASSIFICATION:
                                                                                116
                                                                                                                                                                                                610
                                                                                                                                                                                                                                                                          550
                                                                                                                                                                                                                                                                                                                                                      490
      136
                                            730
                                                                                                                                                                                                                                                                                                                                                                                                                                430
                                                                                                                                                                                                                                      78
                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                          39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     94304
                                                                                                                                                  AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
  CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                          TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                            AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu
                                                                                                                    GAGAATACGGGCGACGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGACGACGC
                                                                                                                                                                                              ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                                AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                          CAGAAGGGTAACCTGCCGGTGCGCGCGCTCTTCACGCGCCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                          GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                  TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                    ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                              ĊTĠĠĀĠĊTĠĠĊAĀĊĠĀĠĊĠĠĊTĠĊTĠĊŢĠĀŢĠĠĀĊŢĠĊĊĠĠĊĊĠĊĀĠĢĀĠĊŢĀŢĀĊĠĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480.00
51.62%
32.70%
14.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          5.67e-39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PA-0002 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2109
121
70
126
53
9
                                                                              135
                                                                                                                                                          115
                                                                                                                                                                                                                                                                                                                                                                                                                              489
                                                                                                                                                                                              669
                                                                                                                                                                                                                                    95
                                                                                                                                                                                                                                                                          609
                                                                                                                                                                                                                                                                                                                                                  549
                                                                                                                                                                                                                                                                                                                                                                                        58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  38
                                                                                                                                                                                                                                                                                                                77
                                                                                                                                                                                                                                                                                                                                                                                        US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                              Sequence 946, Application US/09023655 Patent No. 6607879
                                                                                                                                                  APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DET
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
ADDRESSES: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                  CITY: PALO ALTO STATE: CALIFORNIA
                                                                                            COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1324 ATGAAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1084 AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1024 TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313 LeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys 332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               964 TCCTTCCCAGTGGAGATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         158 -----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACGTGAAAGACCCCACACCCCTCCTTGC 1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGACGCTG------GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG 1431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA 1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ser-GluThrProLeuSerProProCys 341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysLysIleLysAsnGlnThrGlyAlaSerGlyPro------LysSerLysLeuLys 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys 275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                USA
                                                                                                                                                                                                                                                    THE DETECTION OF BLOOD CELL GENE
```

1383

1143 215 1083 196 176 963

1023

903 158

843

158

Ś 밁 Ś 밁 S 뮹 S Ś

```
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-09-023-655-946 (1-2109)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; CLONE: g1418933
US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Zeller Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 946:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IMMEDIATE SOURCE:
LIBRARY: GENBA
CLONE: 9141893
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SEQUENCE CHARACTERISTICS:
LENGTH: 2109 base pair
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: UPPILING DATE: HEREWITH CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS: single
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                               670
                                                                                                                                                                                                                                                                                                                                                                                         610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  490
      904
                                            158
                                                                                                                      155
                                                                                                                                                          790
                                                                                                                                                                                              136
                                                                                                                                                                                                                                    730
                                                                                                                                                                                                                                                                         116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            430
                                                                                                                                                                                                                                                                                                                                                   96
                                                                                                                                                                                                                                                                                                                                                                                                                               78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                19
    AlaAsnIleGly-----
                                                                                                                                                                                          CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT 789
                                                                                                                                                                                                                                                                                                             GAGAATACGGGCGAGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGAGGGC
                                                                                                                                                                                                                                                                                                                                       AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
                                                                                                                                                                                                                                                                                                                                                                                         ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGGAGCAGCAGCACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                             AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                   AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                              CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                        TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENBANK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5.67e-39
480.00
51.62%
32.70%
14.04%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PA-0001 US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2109
121
70
126
53
                                                                                                                                                        843
                                                                                                                                                                                              154
                                                                                                                                                                                                                                                                                                             729
                                                                                                                                                                                                                                                                                                                                                                                                                             95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                549
    963
                                          158
                                                                              903
                                                                                                                    158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 8
US-09-949-016-2615
; Sequence 2615, Application US/09949016
; Patent No. 6812339
                    Query Match:
                                                                                Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              믕
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                          Best Local Similarity:
                                                                                                                                                        US-09-949-016-2615
                                                                                                                                                                                                                                                                                     FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-10-03
PRIOR FILING DATE: 2000-09-08
PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                          Percent Similarity:
                                                                                                                    Alignment Scores:
                                                                                                                                                                                                            NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FASTSEQ for Window
SEQ ID NO 2615
LENGTH: 2475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION: APPLICANT: VENTER, J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: VENTER, J. Craig et al.
TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES
TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS
                                                                                                                                                                              ORGANISM:
                                                                                                                                                                                            TYPE: DNA
                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1492 ACGTGAAAGACCCCACACCCCCCCTCCTTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1324 ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             256 IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                            Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT 1491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ser-GluThrProLeuSerProProCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGACGCTG-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAGAACTGTGGTĠĊŢŢĠĠŢĀĊĀŢŢĠĊŢŢĠĠĊŢĠĠĊĀŢŢĀĠĊĊĠĊŢĊĀGTCĀĊŢGTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysLysIleLysAsnGlnThrGlyAlaSerGlyPro-----LysSerLysLeuLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCCTTCCCAGTGGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
9.68e-39
479.00
51.62%
32.70%
14.01%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG
                    Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                      4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ASSOCIATED
OF DETECTION AND USES THEREOF
  2475
121
70
126
126
53
```

1431

312 1383 1263 255 1203 235 1143 215 1083

1323 275

295

밁

S 밁 Ś 밁 S

8 밁 S 밁 ð 밁 ð 밁 S 밁 ð

밁

US-10-029-345A-109 (1-665) x US-09-949-016-2615 (1-2475)

```
1521
                                                                                                                                                                                                                                                                                                            1353
                                                                                                                                                                                                                                                                                                                                                                                                              1293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1053
                                                                                                                                                                                                                                                                                                                                                                                                                                                             236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  579 TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             59 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
:::|||||||
                                                                                                                                                                                                                                GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                                       GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                                                                         IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
CAGCTGTATTTTACCACCCCTTCCAACCAGAATGTATACCAGGTGGACTCTCTGCAATCT
                                                  LeuLeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlnLys
                                                                                                                                                   LysLysIleLysAsnGlnThrGlyAlaSerGlyPro-----LysSerLysLeuLys
                                                                                                                                                                                                        ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                                                                                                                                                                                                                                                                                                                                                         AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1352
                                                                                                                                                                                                                                                                                                                                                                                                                                           SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla 235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe 215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCCTTCCCAGTGGAGATCTTGCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC 1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGCTCGGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT 992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAATACGGGCGGCGAGTCGGTCCGGGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn 176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                    GGACTCAGCAGCCCATGTGACAACAGGGTTCCAGCACAG
                                                                                                                                                                                                                                                                                                          1412
                                                                                                                                                                                                                                                                                                                                                                                                                                                           255
                                                                                                    1520
                                                                                                                                                                                                     1472
                                                                                                                                                                                                                                                        295
                                                                                                                                                                                                                                                                                                                                                       275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
```

Ś

밁

S

음 성 음

片

8 8 8 8 8

S

Ś

유 성 유

밁

음 성 음 성 음 성

S

8 8 8 8

음 성 음

```
밁
                          Ś
                                                       US-10-029-345A-109 (1-665) x US-09-513-999C-2877
                                                                                                  Query Match:
                                                                                                                Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                         US-09-513-999C-2877
                                                                                                                                                             Pred. No.:
                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 9
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CURRENT APPLICATION NUMBER: US/09/513,999C
CURRENT FILING DATE: 2000-02-24
PRIOR APPLICATION NUMBER: US 60/122,487
PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Duclert, A.
APPLICANT: Giordano, J.Y.
TITLE OF INVENTION: Expressed Sequence Tags and
Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 2877, Application Patent No. 6783961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                  LOCATION: 37
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILE REFERENCE: 59.US2.REG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NAME/KEY: misc_feature LOCATION: 18
OTHER INFORMATION: y=c
                                                                                                                                                                                                                                                 FEATURE:
NAME/KEY: UNSURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LOCATION: 17
OTHER INFORMATION: h=a
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                OTHER INFORMATION:
                                                                                                                                                                                                                                                                                           NAME/KEY: misc_feature
LOCATION: 237
                                                                                                                                                                                                                                                                                                                                         OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                               NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 36
OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                         NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME/KEY: misc_feature
LOCATION: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: CDS
                                                                                                                                                                                                                                                                                                                                                     LOCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                             FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LOCATION: 127..333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OCATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1581 ACGTGAAAGACCCCACACCCCTCCTTGC 1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        333
                           12
ш
             ThrGluArgLeuValAlaLeuLeuGluSerGlyThr-GluLysValLeuLeuIleAspSe
ACTGAGAGGTTGGTGGHYK--CTGGAAAGTGGAACGGNAAAAAGTGCTGCTAATTGATAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ser-GluThrProLeuSerProProCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               sapiens
                                                                                                                                                                                                                                                                                w=a
                                                                                         6.22e-40
475.00
93.81%
93.81%
13.90%
                                                                                                                                                                                                                      Xaa=His
                                                                                                                                                                                                                                                                                                                                                                                                                                                           ç
                                                                                                                                                                                                                                                                                ę
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     엱
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US/09513999C
                                                                                                                                                                                                                                                                                                                                       ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             or
                                                                                                                                                                                                                                                                                                                                                                                                  5
S
                                                                                                                                                                                                                      Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ct
                                                                                                                                                                                                                                                                                                                                                                                                  rt
                                                                                                              Length:
Matches:
Conservative:
Mismatches:
                                                                                   Indels:
Gaps:
                                                       (1-333)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Encoded Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Proteins
```

당 ঠ 밁 र् 밁 Ş 밁 Ś 밁 ঠ

```
SEQ ID NO 1
LENGTH: 1830
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 10
US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-09-557-921-1 (1-1830)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Luche, Ra.
APPLICANT: Wei, Bo
TITLE OF INVENTION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILE REPERENCE: 200125,416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FASTSEQ for Windows Variable of the control of the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           603
  903
                                                 125
                                                                                                                                            105
                                                                                                                                                                                          783
                                                                                                                                                                                                                                                                                   723
                                                                                                                                                                                                                                                                                                                                                                                663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          119
                                                                                                                                                                                                                                    85
                                                                                                                                                                                                                                                                                                                                    66
                                                                                                                                                                                                                                                                                                                                                                                                                            47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 51
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GTCATCATTGACTGCAGGCCCTTCATGGAGTACAACAAGAGTCACATCCAAGGAGCTGTC
ValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSerAspCysPheLeu
                                                                                                                                                                                                                                                                                   CTAGACTTGATTTCCTGTAGGGAAGGCAAGGACTCTTTCAAGAGGATCTTTTCCAAAGAA
                                                                                                                                                                                                                                                                                                                            ThrGluLeuIleGln---HisSerAlaLysHisLysValAspIleAspCysSerGlnLys
                                                                                                                                                                                                                                                                                                                                                                                CACATTAACTGTGCCGATAAGATCAGCCGGCGGAGACTGCAGCAGGGCAAGATCACTGTC
                                                                                                                                                                                                                                                                                                                                                                                                         ABNIleAsnCysSer---LysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuLeuIleAspSerArgProPheValGluTyrAsnThrSerHisIleLeuGluAlaIle
                                            PheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys------
                                                                                                                                       ThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeuLeuAlaGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              euGluLysSerPheAsnSerValHisLeuLeuAla 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                erSerGlnAspValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18SerAlaLysHisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnS
                                                                                                                                                                                        ATTATAGTTTATGATGAGAATACCAATGAACCAAGCCGAGTGATGCCCCCCCAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGGAGAAGAGCTTCAACTCTGTTCACCTGCTTGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                erLysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rArgProPheValGluTyr-AsnThrSerHisIleLeuGluAlaIleAsnIleAsnCysS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Luche, Ralf M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        6.04e-38
469.00
57.72%
35.91%
13.72%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US/09557921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1830
107
65
96
30
                                                                                                                                         124
  962
                                                                                             902
                                                                                                                                                                                        842
                                                                                                                                                                                                                                    104
                                                                                                                                                                                                                                                                                   782
                                                                                                                                                                                                                                                                                                                                 84
                                                                                                                                                                                                                                                                                                                                                                                722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  118
                                              139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               51
                                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOI
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 멁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
US-10-029-345A-109
                                                                                                                                                                  Pred.
                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                    US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-702-705-803
                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                               SOFTWARE: F
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                             ORGANISM:
                                                                                                                                                                                                                                                                                   TYPE: DNA
                                                                                                                                                                                                                                                                                                         LENGTH: 1238
                                                                                                                                                                  No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1245 TTTGAAGAGGCTTTTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGCTTCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1020 ---CCCACCACCCCTGACATCGAGAACGCTGAGCTCACCCCCCATCTTGCCCTTTCCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              650401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         188 ValLeuAsnAlaSer----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    168 LeuGlyCysGlnArgAspValLeuAsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACTGCCAGGCTGGGGTGTCCCGCCTCCGCCACCATCGTCATCGCTTACTTGATGAAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysValLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAAACCTTAACTTCATGGGGCAGTTGCTAGAGTTCGAGGAAGACCTAAACAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnProCysLeuPro---ValAlaAsnIleGlyProThrArgIleLeuProAsnLeuTyr 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCGGATGACCATGACTGATGCTTATAAATTTTGTCAAAGGCAAACGACCAATTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrp
                                                                                                                                                                                                                                                                                                                                                       FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTCATCAACGTCACCACTCATCTTCCCCTCTACCACTATGAGAAAGGCCTGTTC-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGGCAATGAGCAGGATGCTCAGGACCTGGACATGCAGCGGCTGAACATCGGCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TGCCGGGAGGTGGGGGGGCGCATCCGCGGCCTCGAGCTTGCTACCTCAGCCCATC---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Bangur, Chaitar
Lodes, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application
                                                                                                                                                                                                                                                          sapien
(1-665)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            N:
, Tongtong
our, Chaitanya (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - AACTACAAGCGGCTGCCÁGCCACTGÁCÁGCAACAAGCAGAACCTGCGGCAGTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Tom
                                              1.34e-7
453.00
50.52%
31.41%
13.25%
                                                                                                                                                               .34e-36
×
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09702705
US-09-702-705-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ŝ
                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----SerThrLeuValProThrCysIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TyrThrCysProLysProAspPheIlePro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1478
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1076
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1019
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 222
```

Best I Query DB:

ð

밁 ঠ

밁

밁 ક 밁 Ş 밁 ક 밁 र्

```
1092
                                                                                                                                                                                                                                                                           1059
     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   642 GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160 ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 135 LeuCysGluGlyLysSerThrLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                               ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla
                                                                                         ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                                                                                        GCCACGTCCTGTGCTGCGGAGGCTGCTAGC------CCC
                                                                                                                                                                                                                                                                                                                            AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro 319
                                                                                                                                                                                                                                                                                                                                                                               ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC 878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnPro-----CysLeuProValAla-----AsnIleGlyPro
                                                                                                                                                                                                                 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleGlnGlnAsnGlYIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAGCCCTTGGACCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CGCACCGACATCTGCCTCCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGCACACACCGTTCCTGGCGCACAGC
                                                   ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                              ĠĠĠGAGCGGGGCAAGÁĊĊĊĊGCCACCĊĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---ValProThrCysIleSer
                                                   1172
                                                                                                                                                                                                                                                                        1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         224
```

& 유

8 8 8 8 8 8 8 8 8 8 8

정 유

음 성

음 성 음 성 음 성 음

S

8 8 8 8 8 8 8 8 8 8

```
Ş
                                                        뮍
                                                                                   Ś
                                                                                                                     밁
                                                                                                                                            δ
                                                                                                                                                                                   밁
                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                        맑
                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-09-736-457-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Fan, Liqun
APPLICANT: Wang, Aijun
APPLICANT: Wang, Aijun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILLMS DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: PASTSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SOFTWARE: Fas
SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION: APPLICANT: Wang, T
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 803, App
Patent No. 650944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1227 CCCAGC 1232
                                                                                                                                                                                   342
                                                                                                                                                                                                                                               282 GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGAGGAGGAGGTACGCGCCCGC
                           380 LeuSer 381
                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity:
                                                                                                                                                                                                                 77
                                                                                                                                                                                                                                                                            59 GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys 76
                                                                                                                                                                                                                                                                                                                                                                                                      19
                                                                                                                                                                                 ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                            GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                             LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCCGGTTCCCCCCAGCGCCACA
                                                           CGCACCGACATCTGCCTCCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
                                                                                                                                                 SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                      ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                        CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GIGCACTCGGCCCCCAGCAGCCTGCCCTACCTG--
                                                                                       ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                       AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Application US/09736457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ||||||:::
----CACAGCCCCATCACCACCTCT 1226
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1238
120
73
143
46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THE THERAPY AND
                                                                                                                                                                                   401
                                                                                                                       461
                                                                                                                                                      115
                                                                                                                                                                                                                 96
                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                         58
                                                                                                                                                                                                                                                                                                                                                                                                      38
                                                                                                                                                                                                                                                                                                              281
```

```
Sequence 803, Application US/09614124B

Patent No. 6630574

GENERAL INFORMATION:
APPLICANT: Wang, Tongtong
APPLICANT: Hangur, Chaltanya S.
APPLICANT: Lodes, Michael A.
APPLICANT: Lodes, Michael A.
APPLICANT: Lodes, Michael A.
APPLICANT: Lodes, Michael A.
APPLICANT: Carter, Darrick
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 10121.478C9
CURRENT APPLICATION NUMBER: US/09/614,124B
CURRENT FILING DATE: 2001-07-11
NUMBER OF SEQ ID NOS: 1668
SOFTWARE: FRASESEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                   RESULT 13
US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      당
                                                                                                                                                                                                                                                                                                                                                                                             1173
                                                                                                                                                                                                                                                                                                                                                                                                                                                      1134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1059
                                                                                                                                                                                                                                                                                                                                   1227 CCCAGC 1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 149
                                                                                                                                                                                                                                                                                                                                                              LeuSer 381
                                                                                                                                                                                                                                                                                                                                                                                                                       ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCCACGTCCTGTGCTGCGGAGGCTGCTAGC--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetlysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                            GTGCACTCGGCCCCAGCAGCCTGCCCTACCTG-----CACAGCCCCATCACCACCTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGATCCTTCCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnPro------CysLeuProValAla------AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          င်္ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1091
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1058
                                                                                                                                                                                                                                                                                                                                                                                                                       379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                               밁
                                                                         5
                                                                                                          밁
                                                                                                                            δ
                                                                                                                                                                밁
                                                                                                                                                                                           S
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                               吊
                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                               멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-09-614-124B-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-614-124B-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH: 1238
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    522
                     280
                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           168 CTGCCGAGCGC---GGCAGTGCCTGCTGCTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                            759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                225 GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            77 ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                               MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                          IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
   ThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                 GTGGAGATCCTTCCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnPro------CysLeuProValAla------AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGCTGCGCGCTGCGCCGCAACGCCCGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                         ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                             LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                          GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                          GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                                                                   AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                            TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                     LeuCysGluGlyLysSerThrLeu------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                -----ValProThrCysIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1238
120
73
143
46
                                                  998
                                                                                                          938
                                                                                                                                       259
                                                                                                                                                                    878
                                                                                                                                                                                                239
                                                                                                                                                                                                                                                          219
                                                                                                                                                                                                                                                                                                                   199
                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             224
                                                                                                                                                                                                                                                                                        758
                                                                                                                                                                                                                                                                                                                                               701
                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                       159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
```

RESULT 14 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 US-09-671-325-803 Sequence 903, Application US/09671325 Patent No. 6667134 Patent No. 667134 Patent No. 667134 Patent No. 667134 Patent No. 667134 Patent No. 671325-803 PAPLICANT NUMBER US/09/671,325 CURRENT PAPLICANTON NUMBER US/09/671,325 CURR	Qy 300 AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysPro 319 1059 GCCACGTCCTGTGCTGCGGAGGCTGCTAGGTCCAAGGTGCTG 1058 Qy 320 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro 319 221 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro 339 222 TCGGGACCCCTG
Db Db Qy Db Db Db Db Db Db Db Db Db D	B & B & B & B & B & B & B & B & B & B &
180 IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysBroAsp 199 10::::	342 TTGCGCTCCGGCCTCTACTCGGCGGTCATCGTCTACGACGAGCCAGCC

```
밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity:
Query Match:
DB:
                                                                                                                                   ફ
                                                                                                                                                                                           S
                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                            ફ
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lodes, Michael A.
APPLICANT: Panger, Gary
APPLICANT: Vedvick, Tom
APPLICANT: Carter, Darrick
APPLICANT: Retter, Marc
APPLICANT: Retter, Marc
APPLICANT: Mannion, Jane
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C8
CURRENT APPLICATION NUMBER: US/09/589,184
CURRENT FILING DATE: 2000-06-05
NUMBER OF SEQ ID NOS: 827
SOFTWARE: FastSEQ for Windows Version 3.0
                      ঠ
                                                        밁
                                                                                                     밁
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score:
  밁
                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109 (1-665) x US-09-589-184-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo sapien US-09-589-184-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
  759
                            200
                                                        702
                                                                                     180
                                                                                                                 642
                                                                                                                                            160
                                                                                                                                                                       582
                                                                                                                                                                                                    149
                                                                                                                                                                                                                                522
                                                                                                                                                                                                                                                           135
                                                                                                                                                                                                                                                                                       462
                                                                                                                                                                                                                                                                                                                    116
                                                                                                                                                                                                                                                                                                                                                402
                                                                                                                                                                                                                                                                                                                                                                                                         342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  168
                                                                                                                                                                                                                                                                                                                                                                                                                                    77
                                                                                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                         IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
:::
                                                                                                                 GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                       GAGCCCTTGGACCTGGAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                    GlnPro-----CysLeuProValAla-----AsnIleGlyPro
                                                                                                                                                                                                                             TTCTGTTCTAMAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCCACA
                                                                                                                                                                                                                                                           CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                                                                                                AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGAACGCCCGAG
                                                                                                                                                                                                                                                                                                                                                                          SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                            PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                        CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                         1.34e-36
453.00
50.52%
31.41%
13.25%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FOR THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1238
120
73
143
46
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AND
                            219
                                                                                                                                                                                                                                581
 818
                                                                                                                701
                                                                                                                                                                         641
                                                                                                                                                                                                    159
                                                                                                                                                                                                                                                                                                                                                461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 224
                                                        758
                                                                                                                                                                                                                                                                                                                                                                                                                                                               341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            38
```

```
δ
                                                                  밁
                                                                                            δ
                                                                                                                                       밁
                                                                                                                                                                       S
                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
1227
                                                                                                                                           1134
                                 380 LeuSer 381
                                                                                                    360 ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAla
                                                                                                                                                                                                                                               320 AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                                                                                                                                                                                      300 AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                                                                                                              280 ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                         999 ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                939 ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                    260 MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        879 GTGCTGGTGCACTGCCAGGCGGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240 ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220 LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
CCCAGC 1232
                                                                                                                                                                                                                                                                                      GCCACGTCCTGTGCTGCGGAGGCTGCTAGC-
                                                                    GTGCACTCGGCCCCAGCAGCCTGCCCTACCTG-----CACAGCCCCATCACCACCTCT 1226
                                                                                                                                                                            ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                                ACCTCGCAGTTCGTCTTCAGCTTTCCGGTC---TCCGTGGGC
                                                                                                                                                                                                                                                                                                                                                             1058
                                                                                                                                                                              359
                                                                                                                                                                                                                                                   339
                                                                                                                                                                                                                                                                                      1091
                                                                                                                                                                                                                                                                                                                          319
                                                                                                                                                                                                                                                                                                                                                                                              299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             878
                                                                                                                                                                                                                                                                                                                                                                                                                                  998
```

Search completed: February 14, 2005, 11:12:06 Job time : 328.645 secs

This Page Blank (uspto)

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -MODEL=frame+ p2n.model -DEV=xlp
-MODEL=frame+ p2n.model -DEV=xlp
-QP/Ggn2 1/USFTO spool p/US10029345/runat 09022005 091209 25846/app query.fasta_1.1294
-DB=PublIshed Applications NA -QPMT=fastap -SUPFIX=p2n.rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100
-TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -ORM-ext -HEAPSIZE=500 -MINLEN=0
-THR MIN-0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM-ext -HEAPSIZE=500 -MINLEN=0
-MAXIEN=2000000000 -USER-USIO029345 @CGN 1 879 @Funat 09022005 091209 25846
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -
-LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Command line parameters:
-MODEL=frame+_p2n.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             .
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xgapop 10.0 , y
Ygapop 10.0 , y
Fgapop 6.0 , I
Delop 6.0 , I
                                                                                                                                                  5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3418
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   February 14, 2005, 10:56:55; Search time 887.813 Seconds (without alignments) 4419.632 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Published_Applications_NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109
/ cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO8_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USO9E_PUBCOMB.seq:*
/ cgn2_6/ptodata/2/pubpna/USOE_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                       /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                   6/ptodata/2/pubpna/PCTUS_PUBCOMB.seq:*
6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10757346
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

; TYPE: DNA ; ORGANISM: Homo sapiens US-09-816-494-3

SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 3 LENGTH: 1998

Result No.	9 1 2	ery	P	DB	D	ecription	
· 20 F	3406	99.6	1998	17	-10-377-072-		` ⊉
ىد د	40	99	1998 2732	18	68-506-2	Sequence	27, Appl
ر ت	40	9.	3059	17	S-10-257-026-	Sequence	•
6	40	9	3496	9	09-964-277-1	quence	Appl
7	4		3521	18	S-10-370-715	Sequence	261, App
۵ ۵	4 4	ی م	3544 4474	17	16-494-J 377-072-	Sequence 1	, Appii 25. Appl
10	44		3544	18	-10-377-	Sequence	• •
Ľ	40	9	3625	17	-10-425-114-	1Ce	N.
12	4	. 6	3766	17	10-343-357-	តេ	n ~ `
13	40	۰.	4790	9 L	-10-648-593- -10-357-930-	9 2	
15 14	40	99.6	5145	.1 8	-10-357-930-		2096
16	40	9 !	5145	18	-10-357-930-	יטי	2107
17	44	9	5145	18	10-357-930-		2108
18	40	9	5145	18	-10-357-930-	w	2130
19	4.0	9.9	5145	. 18	-10-357-930-	, ,,	2130
) C	4 6	۰.9	5145	. J	-10-357-930-	, ,,	7822
22	4 4	9 4	5145	18	-10-357-930-		2681
23	40	9	5145	18	-10-357-930-	(U	2691
24	6	9	5145	18	-10-357-930-	w	2692
25	4 6	9.9	5145	18	10-357-930-	, ,,	27145
27	40	٩	5145	11 E	-10-357-930-		2867
28	씽	9	2102	7	-10-094-749-6	U	673,
2 20	339	o w	2966	17	-10-296-115-52		520,
<u>ა</u> ც	י ס	Φ.	2200	;			255.
32	048	۱۳	3332	9	09-964-277-20	N3	0, App
نی د نیاد	.	• •	1916	17	10-108-260A	ט נט	4.
ωú	0,0	36.9	2476	17	-10-003-656-1	Sequence	1, Appl 28, Appl
36	Ģ.		2039	17	-10-072-012-	10	9
37	724	٠.	418	18	-10-357-930-112		
ຸວພ	งผ	٠.	ת ס	1 2	-10-357-930-324	ט נט	_ V
40	S	٠:	ס ת	, p	10-357-930-413		7272
. 4	707	?:	425 1	18	-10-357-930-	Sequence	0 !
4	703	٥.	g,	18	10-357-930-319		3190
c 43	703	.0	467	18	-10-357-930-408	10	. 0
0 44	703	۰.	467	1 2	10-357-930-410	''	1001
	869	٠.	427	μ	-10-35/-930-10e		2
					ALIGNMENTS		
RESULT 1 US-09-816			116 /				
نو اتا د	t No. US	No. USZO020034 INFORMATION:	307A1	•			
TITLE		OF INVENTION: 3	18692 18692	AND 2	21117, NOVEL DUAL SPECIFICI	CITY	
FILE	REFEREN	CE: 104	-030	02		,	
; CURRENT	ENT APPL	ICATION	NUMBER:	-01-	73		
; PRIOR		ATION N	BER:	rn e	01		
; PRIOR	R OF	DATE: :	NOS: 10	-24			
SOFT	RE C	FastSEQ fo		BWO	Version 4.0		

ঠ	g Q	Qy	Qy Db	Qy dd	Q y	B 8	B &	dg VQ	B &	4g 4g	B 8	dg VQ	B 8	Qy db	Qу	DB:	Percent Best Lo	Alignment Pred. No.
Agn 3	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LYSARGMEtASpMetSerLeuAspGluAlaTyrArgPheValLySGluLySArgProThr 280 	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysBroLysBroAspPhe 200 W	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	101 AspCy8PheLeuThrValLeuLeuGlyLy8LeuGluLy8SerPheAsnSerValHisLeu 120 	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	61 AspLysValleuIlethrGluLeuIleGlnHisSeralaLysHisLysValAspIleAsp 80 	41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40 	1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20 	Gaps: 9 Gaps: 15A-109 (1-665) x US-09-816-494-3 (1-1998)	Similarity: 99.85% Conservative: 1 cal Similarity: 99.70% Mismatches: 1 arch: 99.65% Thalls: 0	Scores: 0 Length:
Qy db	Db 29	QQ da	g Qq	₽ <i>Q</i>	dg Qy	g Qy	B &	p 4	}	, B &	, B &	, B &	40 AG	\$ &	Qq da	4a	2 B	Ор
661 IleIleGluValSer 665 1981 ATCATTGAGGTCTCC 1995	641 ArgSerArgGlucluLeuGlyLysValclySerGlnSerSerPheSerGlySerMetGlu 660 	:21 LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 		581 AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg 600 	561 ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer 580	SerAspIleLeuAlaProGInThrSerThrProSerLeuThrSerSerTrpTyrPheAla 5	0-H	01	SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu	AspLysGluGluAlaSerIIeProLysLysLeuGlnThrAlaArgProSerAspSerGln	LysLeuCysGlnPheSerProValGInGluLeuSerGluGInThrProGluThrSerPro	SerSerSerGluAspAlaLeuGluTyrTyrLysPrOSerThrThrLeuAspGlyThrAsn 	SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe	381 1141	361 1081	1021 TGTGCCGACTCTGCTACCTCAGAGGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG 1080	961 GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1	901 321

Qy 41 HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	Qy 21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	Qy 1 MetalaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20	Gaps: 10-377-072-27 (1-1998)	cent Similarity: 99.85% Conservative: t Local Similarity: 99.70% Mismatches: ry Match: 99.65% Indels:	0 Length: 3406.00 Matches:	; LOCATION: (1)(1998) US-10-377-072-27	TYPE: DNA ; TYPE: DNA ; ORGANISM: Homo Sapiens ; PEATURE: ; NAME/KEY: CDS	rsion 4.0	<pre>priok Filing DATE: 2001-03-23 prior Application NUMBER: US 09/815,419 prior Filing DATE: 2001-03-22 prior Filing DATE: 2001-03-22 prior Application data removed - See File Wrapper or PALM.</pre>	; PRIOR FILING DATE: 2001-05-21 ; PRIOR APPLICATION NUMBER: US 60/205,508 ; PRIOR FILING DATE: 2000-05-19 ; PRIOR APPLICATION NUMBER: US 09/816,494	; PRIOR FILING DATE: 2001-04-25 ; PRIOR APPLICATION NUMBER: US 60/199,801 ; PRIOR FILING DATE: 2000-04-26 ; PRIOR APPLICATION NUMBER: US 09/861,801	PILING DATE: 2000-11-28 APPLICATION NUMBER: US 60/187, FILING DATE: 2000-03-07 APPLICATION NUMBER: US 09/843,	; PRIOR FILING DATE: 2001-06-29 ; PRIOR APPLICATION NUMBER: US 60/215,370 ; PRIOR FILING DATE: 2000-06-29 ; PRIOR APPLICATION NUMBER: US 09/723,806	EFERENCE: MPIO: IT APPLICATION N IT FILING DATE: APPLICATION NUM	; APPLICANT: T881, FONG-YING ; TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117, ; TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES ; TITLE OF INVENTION: AND USES THEREFOR	Meyers, Rachel E. Williamson, Mark J Rudolph-Owen, Laur Chun, Miyoung	; APPLICANT: Millennium Pharmaceuticals Inc. ; APPLICANT: Curtis, Rory A.J. ; APPLICANT: Logan, Thomas Joseph ; APPLICANT: Glucksmann, Maria A.	ಬ⇔⊣ಜ	RESULT 2
B &	}	8 B 8	8 B	₽	Ş	B 8	B &	B &	Db Qy) B Q	D Q	₽ &	B 8	g dg	р Q	D Q	B &	Oy Db	DЬ
1201 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1260				961 GAACCTGTCCCTGCTGTCTCAGAGGGTTGACAGAAAAGCGAGACGCCCCTCAGTCCACCC 1020 341 CY8AlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360	GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 		ProTrpLeuAspLysSerValAspPhelleGluLysAlaLysAlaSerAsnGlyCysVal 2	IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	161 ArgIleLeuProAsmLeuTyrLeuGlyCysGlnArgAspValLeuAsmLysGluLeuIle 180		121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140		81 CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80 	121 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 180

```
RESULT 3
US-10-377-072-27
Sequence 27, Application US/10377072
Publication No. US20040157221A9
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals In
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPIO3-0180MNIM
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
                                                                                                                                                                                                                                                                                                                                                                                                                                       1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC 1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAAGGAGGAAGCCAGCATCCCCCAAGAAGCTGCAGACCCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspLysGluGluAlaSerIleProLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                            Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTTTCCACCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                       1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                   AND
                                                                                   49933
                                                                                   MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(
US-10-377-072-27
                             δ
                                                                               밁
                                                                                                                 δ
                                                                                                                                                              밁
                                                                                                                                                                                            S
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/189,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2001-05-21
PRIOR PRIOR PRIOR DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR FILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQ ID NO 27
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
ORGANISM: Homo
                                      141
                                                                                                                       121
  421
                                                                                 361
                                                                                                                                                                301
                                                                                                                                                                                                       101
                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                              121
                                                                                                                                                                                                                                                                                      81
                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FastSEQ
                                                                                                                                                                                                                                             CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                     ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                      LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                    AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                                   HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                          AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 for Windows
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
3406.00
39.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    00+
```

片

160 420 140 360

240

180 60 40 60

480

Ś 밁 Ś

片 Ş 뫄 Ś 문 ঠ 밁 Ś 문 8 밁 Ś 밁 S 밁 S 밁 Ś 밁 Ş 밁 S

Σ

```
1381
                                                                                                                                                                                                                                                                                                                                                                                             1141
                                                                                                                                                                                            1321
                                                                                                                                                                                                                                                                                                                              1201
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1081
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1021
                                                             1441
                                                                                                                                                                                                                                                             1261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           361
                             501
                                                                                              481
                                                                                                                                                             461
                                                                                                                                                                                                                            441
                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                             401
                                                                                                                                                                                                                                                                                                                                                                                                                            381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              961
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                 SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly 520
                                                                                                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                           TCTCTGGATATCAGTTTCAGTATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420
                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysFroLysFroAspPhe
                                                                                SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                             AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                            1380
                                                             1500
                                                                                                                              1440
                                                                                                                                                                                                                                                             1320
                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
1560
                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                              1260
                                                                                                                                                                                                                                                                                                                                                                                             1200
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1140
                                                                                              500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1080
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1020
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              540
```

S

음 중 음

음 성 음

δ

8 8 8 8 8 8 8 8 8 8 8 8 8

밁

음 성

음 성 음

음 성 음 성

```
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOMMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MANNING, GERADO
APPLICANT: MANNING, GERADO
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: FLANAGAN, PETER
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATAGES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: PATENTIN VEY: 2.1
SEQ ID NO 2
LENGTH: 2732
           S
                                   밁
                                                                    Ś
                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 4
US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                                                              US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                      US-10-029-345A-109 (1-665) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                 Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1981
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1921
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1861
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1561
                                           538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      561
- 21
           SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                            MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AAGCAGTTTAAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                             sapiens
                                                                                                                                 0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                     Gaps:
                                           597
                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1980
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1860
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1740
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1920
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1800
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1620
```

```
Ş
                                     뭐
                                                     8
                                                                              밁
                                                                                              8
                                                                                                                    망
                                                                                                                                         5
                                                                                                                                                                    밁
                                                                                                                                                                                    중 유
                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                        멍
                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                              뮍
                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                     1618
                                                                                                                         1498
                                                                                                                                                                    1438
                                                                                                                                                                                                               1378
                                                                               1558
                                                                                                                                                                                                                                                         1318
                                                                                                                                                                                                                                                                                                   1258
                                                                                                                                                                                                                                                                                                                                             1198
                                                                                                                                                                                                                                                                                                                                                                                       1138
                                                                                                                                                                                                                                                                                                                                                                                                                                  1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1018
                                                          361
                                                                                                                                               321
                                                                                                                                                                                         301
                                                                                                                                                                                                                                   281
                 381
                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                 221
                                                                                                                                                                                                                                                                                                                                                                                                             201
                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              41
   SerG1yLeuHisLeuSerA1aAspArgLeuG1uAspSerAsnLysLeuLysArgSerPhe
                                               ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                        CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                         GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                  GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                          IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                    cccaecereccaecerecaecerecretraeaeeacaecececreeracaeececre
                                                                                                                                                                  CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                             ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                               LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                       ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                  CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                   IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
               400
                                   1677
                                                        380
                                                                              1617
                                                                                                                        1557
                                                                                                                                             340
                                                                                                                                                                                                             1437
                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                         1377
                                                                                                                                                                                                                                                                                                  1317
                                                                                                                                                                    1497
                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                            1257
                                                                                                                                                                                                                                                                                                                                                                                       1197
                                                                                                                                                                                                                                                                                                                                                                                                                                 1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1077
                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     837
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               777
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   657
Sequence 1, Application US/10257026
Publication No. US20040086859A1
GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH
TITLE OF INVENTION: New dual specificity pho
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026
CURRENT FILING DATE: 2003-11-07
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 1
LENGTH: 3059
TYPE: DNA
                                                                                                                                           RESULT 5
US-10-257-026-1
                                                                                                                                                                              밁
                                                                                                                                                                                          Ş
                                                                                                                                                                                                                 뭥
                                                                                                                                                                                                                                     5 유
                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ϋ́
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            片
                                                                                                                                                                              2518
                                                                                                                                                                                                                        2458
                                                                                                                                                                                                                                                                  2398
                                                                                                                                                                                                                                                                                                            2338
                                                                                                                                                                                                                                                                                                                                                      2278
                                                                                                                                                                                                                                                                                                                                                                                                                                           2158
                                                                                                                                                                                                                                                                                                                                                                                                2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2098
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2038
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1738
                                                                                                                                                                                                 199
                                                                                                                                                                                                                                            641
                                                                                                                                                                                                                                                                                      621
                                                                                                                                                                                                                                                                                                                                601
                                                                                                                                                                                                                                                                                                                                                                          581
                                                                                                                                                                                                                                                                                                                                                                                                                      561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    501
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
```

```
1678 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC 1737
ATCATTGAGGTCTCC
                                                                                                                                                                                                                              LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                               IleIleGluValSer 665
                                                                                                                             ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660
                                                                                                                                                                                                                                                                                                                                  GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                    AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                     CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                        GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACTGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
  2532
                                                                                                                                                                                                                                                   640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                    2457
                                                                                                                                                                                                                                                                                                     2397
                                                                                                                                                                                                                                                                                                                                                                                                      2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2037
                                                                                                      2517
                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1857
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
```

specificity phosphatase

Qy 221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaSerAsnClyCysVal 240	Qy 181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200	Qy 141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	427 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 48 121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 14	GlnLy8ValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 1 	Db 247 CACATTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 306 Qy 61 AspLysValleulleThrGluLeulleGlnHisSerAlaLysValAsplleAsp 80	Qy 21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	1 MetAlaHisG 	gument scores: d. No.: ve: cent Similarity: go.85% Conservative t Local Similarity: go.70% Mismatches: ry Match: 17 Gaps: 10.028-3464-100 (1-666) x 10-10-767-026-1 (1-206	GANISM: HATURE: ME/KEY: C CATION: (257-026-1
Q D D Q 1	- -		–	ОУ ОУ 1	0y Db 1		P	2y 1	рь Оу рь 1
B67 GCCTACAGCTGCAGCTGCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 1926 601 GlnLysproSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu 620		627 TCTCCACTGCATCGAAGTGGGAGGCGTGGAGGACCAATTACCACCACCACCTTCCTT	507 GATÄAGGÄGGÄÄĞCÄĞCAĞCAĞCCĞAĞAĞĞĞCTĞCÄĞACCĞCĞAĞĞCĞĞĞĞĞĞ 1566 481 SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu 500	441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460 441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460 447 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGAGACCTCCGAAACCCGTCCT 1506 447 AAGLTATGCCAGTTCTCCCCTGTTCAGGAACTATCGAGACCTCCGAAACCAGTCCT 1506 448 AAGLTATGCCAGTTCTCCCCTGTTCAGGAACTATCGAGAGCTCCCGAAACCAGTCCT 1506 449 AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGAGAGCCAGAACCAGTCCT 1506 440 AAGCTATGCCAGAGAGCAGAGCAGAGCAGAGCAGAGCAG	327 TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC 1386 421 SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440	SerG-Y-LeuH-BLEUS FALARBARGLEUGILLABDS ERABRILYBARGS ER FINNE SER GEBONNE SER	361	321 GluproValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340	967 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGAAGAAC 1026 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuCeuHisLeuGluLysProAsn 320 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuCeuHisLeuGluLysProAsn 320 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLysLeuGluLysProAsn 320 301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLysLeuGluLysProAsn 320 302 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLysLeuLysLeuGluLysProAsn 320 303 GlnThrGlyAlaSerGlyProLysSerLysLeuL

QY 181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 1	Qy 141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	QY 121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	Qy 101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120	Qy 81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100	Oy 61 ASpLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80	Qy 41 HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	Qy 21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	MetIleGlyThrGlnIleV ATGATTGGAACTCAAAITG	99.65% Indels: 9 Gaps: 665) x US-09-964-277-1 (1-3496)	No.: 0 1406.00 15 Similarity: 99.85% 16 Cocal Similarity: 99.70%	; ORGANISM: Homo sapiens US-09-964-277-1 Alignment Scores:	SOFTWARE: FastSEQ for SEQ ID NO 1 LENGTH: 3496 TYPE: DNA		0	O H	Db 2107 ATCATTGAGGTCTCC 2121	2047 AGGTCACGGGAAGAGC
D Q	DJ . 29	db Q	S B S) B &	, B &	D QY	da da	, B &	2 Db 2 P	D 29	Qy db	D Q	D Qy	Db Q	D Qy	d Q	D &	Db
O bi	521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis 540	62	SerLyBargLeuhisservalArginrserserserviyinralaginargserLeuLeu	ABDLYSGIUGIUALASSETILEPTOLYSLYSLEUGINThTALARGYPTOSETABSETGIN ABDLYSGIUGIUALASSETILEPTOLYSLYSLEUGINThTALARGYPTOSETABSETGIN ABDLYSGIUGIUGIUGIUGIUGIUGIUGIUGIUGIUGIUGIUGIUG	LystencysGinpheserProvaiGinglubeuserGluGinThiProGluThiPserPro	SerSerSerGluAspAlaLeuGluTyTTyrLysPrOSerThrThrLeuAspGlyThrAsn		Serglyweuhlsweuseralaaspargleugluagsserashlyssweulysargserfne	ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 3	341 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	201 ILEPTOGLUSERH.SPNELEUARGYALPROVALARNASDSERPNECYSGLULYSILELEU 220	02 CAGCAGAATGGGATTGGTTAATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT

Qy 41 HisileLeuGluAlaileAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 	aHiBGluMetIleGlyThrGlnIleValT 	/ Match: 99.65% Indels: / Match: 18 Gaps:	Alignment scores: Pred. No.: Score: Score: 90.85\$ Conservative: 1 Best local Similarity: 90.85\$ Conservative: 1 Best local Similarity: 90.70\$ Mignatches: 1	SM: H 715B-	NUMBER OF SEQ ID NOS: 742 SEQ ID NO 261 LENGTH: 3521 TYPE: DNA		APPLICANT: WILLIAMS, P. MICKEY APPLICANT: WOOD, WILLIAM I. APPLICANT: WO,THOMAS D. TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune	APPLICANT: CLARK, HILLARY APPLICANT: BRISDELL, HUNTE APPLICANT: BACKMAN, JANET APPLICANT: SCHORNFEID, TILL R	ublication ENERAL INFO Patin Doc	- Ψ	Qy 661 IleIleGluValSer 665 Db 2542 ATCATTGAGGTCTCC 2556	Qy 641 ArgSerArgGluGluLeuGlyLy6ValGlySerGlnSerSerPheSerGlySerMetGlu 660 	Oy 621 LYBGlnPheLYBArgArgSerCYBGlnMetGluPheGlYGluSerTleMetSerGluAsn 640	Qy 601 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheglu 620	QY 581 AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg 600	Qy 561 ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer 580
& & &) B Q	d Sy	B &	D Q	B &	g Qy	Qy db	g Qy	B &	B &	g Qy	g Qy	Db 49	B &	}	B 5	Q dy
401 Serieuaspitelysservalserlytseralasermenalaserbeuntschyrie 420 [] [] [] [] [] [] [] [] [] [] [] [] []	81 SerGlyLeuH1sLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe	361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	341 CybalaabbSeralaThrSerGlualaalaGlyGlnargProValHibProAlaSerVal 360 	321 GluproValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIIe 180 	1 InflewealerointcystleserginerocystlewerovalataAsnileGiyeroint		ASDCYSFRELEUTINTYSTLEGLEGIYYYSLEGIGILIYYSSETROASHSETVSLHISHEGI 	TGCAGTCAGAAGGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTTCA	AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp

```
RESULT 8

US-09-816-494-1

; Sequence 1, Application US/09816494
; Patent NO. US20020034807A1
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel A.
; TITLE OF INVENTION: 38692 AND 21117, NOVEL DUP
; TITLE OF INVENTION: PHOSPHATASE MOLECULES AND
; TITLE OF INVENTION: WINDER: US/09/816,494
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION WINDER: US 60/191,858
; PRIOR APPLICATION WINDER: US 60/191,858
; PRIOR APPLICATION NOS: 10
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3544
; TYPE: DNA
; ORGANISM: Homo sapiens
; NAME/KEY: CDS
; NAME/KEY: CDS
; LOCATION: (589)...(2583)
                                                                                                                                                                                                                                                                                                                                                                                                                                2484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2244
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2124
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1824
                                                                                                                                                                                                                                                                                                                                                                                                 661
                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCCACCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                 665
                                                                                                                                                                                                                                                                                                                                                                   2558
                                                                                                                                                                                                                         AND
                                                                                                                                                                                                                                        DUAL
                                                                                                                                                                                                                         USES
                                                                                                                                                                                                                                        SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                2543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2183
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2063
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2003
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1943
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1883
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          460
                             뮍
                                                      Š
                                                                                        밁
                                                                                                                  δ
                                                                                                                                                        밁
                                                                                                                                                                               S
                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                              뮹
                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                     몽
                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.
                                1429
                                                                                                                                                                                                                                                                                    1189
                                                                                                                                                        1309
                                                                                                                                                                                                                      1249
                                                                                                                                                                                                                                                                                                                                               1129
                                                                                                                                                                                                                                                                                                                                                                                                              1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1009
                                                            281
                                                                                                                                                                                       241
                                                                                                                                                                                                                                                    221
                                                                                                                                                                                                                                                                                                                201
                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                            LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                          LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                       ProTrpLeuAspLysSerValAspPheTleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200
                                                                                                                                                                                                                                                                                                                                                                                                                         ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                      IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                               CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                        CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
3406.00
39.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0011
                               1488
                                                                                           1428
                                                                                                                         280
                                                                                                                                                        1368
                                                                                                                                                                                       260
                                                                                                                                                                                                                      1308
                                                                                                                                                                                                                                                                                   1248
                                                                                                                                                                                                                                                                                                                                               1188
                                                                                                                                                                                                                                                                                                                                                                                                            1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   648
```

밁 Ś 밁 Ś 밁 Ş 문 5 밁 Ş 밁 Ś 밁 Ś 밁 8 밁 Ş 밁 S В 8 밁 Q 밁

```
2389
                                                                                                                                                                                                                                                                                                                                                                      2269
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2209
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2089
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2029
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1969
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1489
                                                            2509
                                                                                                                                        2449
                                                                                                                                                                                                                                                                                            2329
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                          621
                                                                                                                                                                                                                                                                                                                                581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               381
                      661
                                                                                                                                                                                                                                                    601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              321
                                                                                                                                                                                                                                                                                                                  AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
IleIleGluValSer
                                                                                                                                                                                                                                      GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                            ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                      ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                            LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                            GCCTACAGCTGCAGCTAGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                        ACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCGCCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyLeuH1sLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                        665
                                                            2568
                                                                                                                                                                                                                2448
                                                                                                                                                                                                                                                                                            2388
                                                                                                                                                                                                                                                                                                                                                                        2328
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2088
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1548
                                                                                                  660
                                                                                                                                                                          640
                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                            580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340
```

8 8 8 8 8 8

닭

8 8 8 8 8 8 8

밁

δ

8 8 8 8 8

g

중 유

음 중

र्

ঠ

음 성

밁

δ

```
APPLICANT: KNUOLPH-Twent, APPLICANT: CAULA (CAUTA)
APPLICANT: TBai, Fong-Ying
ITILE OF INVENTION: NOVEL 2869, 25934, 26335, 50365, 21117,
ITILE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
ITILE OF INVENTION: AND USES THEREFOR
ITILE OF INVENTION: WHORE: US/10/377,072
CURRENT PILLING DATE: 2003-02-27
PRIOR REPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUM
                                                      밁
                                                                                                                á
                                                                                                                                                                                밁
                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...
                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                   Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 25, Application US/10377072 Publication No. US20040009501A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2569 ATCATTGAGGTCTCC
                                                            649
                                                                                                                         21
   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Glucksmann, Maria A.
Meyers, Rachel E.
Williamson, Mark J.
Rudolph-Owen, Laura A
                                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                      MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                            AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       (2586)
                                                                                                                                                                                                                                                                                                                                                                   0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Laura A
                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                          0011
                                                                                                                                                                                         648
   60
                                                            708
                                                                                                                         40
```

Š	B 8	Q y Db	р В	Ф	Qy	문 <i>정</i>	g Qy	B 8	8 Q	g 43	QQ dQ	Db Qy	Db Qy	QY db	Qу	B 8	Qy Db	Db
401 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420 	381 SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400 	361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	341 CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	321 GluProValProAlaValSerGluGlyGlyGlnLyBSerGluThrProLeuSerProPro 340	301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	121 LeualaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	81 CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80 	
	. ~. ~. ~.			* * G &	: B S	y da Yo	Db QY		QQ QY	Qy da	Qy db	Qy da	Qy dd	Qy Db	Qy Db	Db	Qy dd	
LICATION N	APPLICANI: CHUH, MIYOUNG APPLICANI: TSAİ, FONG-YİNG TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117, TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES TITLE OF INVENTION: AND TOES THEFEROM	APPLICANT: GLUCKSMAIN, MAILA A. APPLICANT: Meyers, Rachel B. APPLICANT: Williamson, Mark J. APPLICANT: Rudolph-Owen, Laura A. APPLICANT: Chundleh-Owen, Laura A.	Millennium Pharmace Curtis, Rory A.J. Logan, Thomas Jose	CT CD 1	bi ilelieGinvalser 65 2569 ATCATTGAGGTCTCC 2583	641 ArgSerArgGluGluI	621 LysGInPheLysArgArgSerCysGInMetGluPheGlyGluSerTleMetSerGluAsn 640	601 GlnlysproSerAspArgAlaAspSerArgArgSerTrpHsGluGluSerProPheGlu	581 AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg [561 ThrGluSerSerHigPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer	7 SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla 560	521 LeuSerThröerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis	501 SerProLeuHisArgSerdlySerValGluAspAsnTyrHisThrSerPheLeubheGly	N	461 1969	Y 441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460	421 1849	1789

```
S
                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                        밁
                                                            S
                                                                                                          S
                                                                                                                                          밁
                                                                                                                                                               ð
                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                      र्
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                        र्
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                           ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (589)...
US-10-377-072-25
              S
                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT FILING DATE: 2003-02-27

PRIOR APPLICATION NUMBER: US 09/895,860

PRIOR FILING DATE: 2001-06-29

PRIOR PELICATION NUMBER: US 60/215,370

PRIOR PELLING DATE: 2000-06-29

PRIOR APPLICATION NUMBER: US 09/723,806

PRIOR FILING DATE: 2000-011-28

PRIOR PILING DATE: 2000-01-28

PRIOR PILING DATE: 2000-04-25

PRIOR PILING DATE: 2001-04-25

PRIOR PILING DATE: 2001-04-25

PRIOR PILING DATE: 2001-04-26

PRIOR APPLICATION NUMBER: US 60/199,801

PRIOR APPLICATION NUMBER: US 09/861,801

PRIOR APPLICATION NUMBER: US 60/205,508

PRIOR PILING DATE: 2001-05-19

PRIOR APPLICATION NUMBER: US 09/816,494

PRIOR APPLICATION NUMBER: US 09/815,419

PRIOR APPLICATION NUMBER: US 09/815,419

PRIOR PILING DATE: 2001-03-22

                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOPTWARE: FASTSEQ
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  No.:
                                                                                           889
                                                                                                                                                                                                                                                                                                                                                       589
                141
                                        949
                                                                  121
                                                                                                                  101
                                                                                                                                            829
                                                                                                                                                                                               769
                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                     81
                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                            ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                         CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                              HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                      MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                            GACTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sapiens
                                                                                        TCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                 0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                   0011
                                                                                                                  120
                160
                                        1008
                                                                                          948
                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                     100
                                                                                                                                                                                              828
                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                    708
                                                                                                                                                                                                                                                                                                                            40
                  Ś
                                                   망
                                                                                              밁
                                                                                                                         Ş
                                                                                                                                                      뮍
                                                                                                                                                                                                   片
                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                         묽
                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                       δ
                                                                                                                                                                         5
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
  2089
                                                                                                                                                                                                                                                              1789
                                                                                                                                                                                                                                                                                                               1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1129
                                                                                                       1969
                                                                                                                                                         1909
                                                                                                                                                                                                           1849
                                                                                                                                                                                                                                                                                                                                                                   1669
                                                                                                                                                                                                                                                                                                                                                                                                                       1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1249
                         501
                                                                            481
                                                                                                                                461
                                                                                                                                                                                 441
                                                                                                                                                                                                                                     421
                                                                                                                                                                                                                                                                                     401
                                                                                                                                                                                                                                                                                                                                        381
                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                             341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             221
  AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                             SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                  GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                SerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuLeu
                                                                                                       GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                         AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                       LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                           TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                         SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                             TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCATGCTTACATGGCTTC
                                                                                                                                                                                                                                                                            SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                   CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGACTGGAGCATCAGGGCCAAAGACCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cccrcci
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                       ICTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                          520
                                                                              500
  2148
                                                     2088
                                                                                                                                480
                                                                                                                                                         1968
                                                                                                                                                                                                           1908
                                                                                                                                                                                                                                                              1848
                                                                                                                                                                                                                                                                                                                1788
                                                                                                                                                                                                                                                                                                                                                                   1728
                                                                                                                                                                                                                                                                                                                                                                                                                       1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1068
                                                                                                       2028
                                                                                                                                                                                   460
                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
```

QY 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20	3406.00 milarity: 99.85% Similarity: 99.70% h: 99.65% 17 345A-109 (1-665) x US-10-425-	HER INFORMATION: Clone ID: LIB4119-028-H6_FLI 425-114-26234 ent Scores: No.: University Length:	; LENGTH: 3625 ; TYPH: DNA ; ORGANISM: Homo sapiens ; FEATURE:	CURRENT APPLICATION NUMBER: US/10/425,114 CURRENT FILING DATE: 2003-04-28 NUMBER OF SEQ ID NOS: 73128 SEQ ID NO 26234	; APPLICANT: Cao, Yongwei ; TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With ; TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement ; FILE REFERENCE: 38-21(5311)	; APPLICANT: Zhou, Yihua ; APPLICANT: Kovalic, David K. ; APPLICANT: Screen, Steven E ; APPLICANT: Tabaska, Jack E	equence 26234, ublication No. ENERAL INFORMAT APPLICANT: Liu,	2383 AICALIGANGLUIC 2383 RESULT 11 US-10-425-114-26234	661 IleIleGluValSer	Qy 641 ArgSerArgGluGluLeuGlyLysValGlyGerGlnSerSerPheSerGlySerMetGlu 660	Qy 621 LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn 640	2389 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGAG	CACTTGCGGAGACCAAG1 pSerArgArgSerTrpHi	uProThrCysGlyAspGlnValTyrSerValArgArgArg 6	Qy 561 ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer 580	2209 TCGGATATCTTGGCCCCCCAGACCTCTACCCCTTGACCAGCAGCTGGTATTTTGCC 2	2149 CITICLACCAGCAGCACCICACGAAGTCIGCIGGCCTGGGCCTTAAGGGCTGGCAC 2208 QV 541 SerAsplleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrnTvrPheala 560	521 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
Q D Q	5 S B 1	QV B QV	Qy db	D Qy	p Q	Oy db	D Qy	B &	Db	9d Ag	S P	Q V	P &	da z	Oy Db	8 8	β δ	Db
361 ProSerValFroSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380		301 GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	261 LysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	221 ProtrpleuasplysservalaspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCYsGluLysIleLeu 220 	181 GInGInAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200	72 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGGTGATG	1112 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1171 161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180	1052 CTTGCAGGTGGGTTTGCTGAGTTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC 1111 141 ThrLeuValProThrCysilleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	21	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120	932 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	872 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT 931 81 CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100	61	41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	

ঠ 밁

밁 δ

```
Sequence 17, Application US/10343357

Publication No. US20040058341A1

GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: YAO, Monique G.; BURFORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: LU, Joennifer A.; BAUGHN, Mariah R.
APPLICANT: YUE, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
                                                                                                                                                                                                                                                                                               RESULT 12
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                     2672
                                                                                                                                                                                                                                                                                                                                                                                                                                                         2612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2432
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2372
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2072
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1952
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1832
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2012
                                                                                                                                                                                                                                                                                                                                                                                                               661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                441
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           421
                                                                                                                                                                                                                                                                                                                                                                     ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                               |||e|leGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGCATCATGTCAGAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerProLeuH1sArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                  665
                                                                          Ξ.
                                                                                                                                                                                                                                                                                                                                                                                                                                                            2671
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2551
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2491
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2431
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2611
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2251
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2131
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2071
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1891
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT PILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: PCT/US01/23716
PRIOR FILING DATE: 2001-07-26
PRIOR PILING DATE: 2001-07-26
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR PILING DATE: 2000-09-28
PRIOR PILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-03
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR FILING DATE: 2000-08-30
PRIOR PRIOR PILING DATE: 2000-09-08
VENTOR PILING DATE: 2000-09-08
                                                                                    8
                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                        S
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-343-357-17 (1-3766)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: KEARNEY, Liam
TITLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: misc_feature
OTHER INFORMATION: Incyte
         161
                                                                                             141
                                                                                                                                                                                    121
                                                                                                                                                                                                                                838
                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                               718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     538
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                                                                                                                                                                                                           HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
       ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                            CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                   ACTOTAGTOCOTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ID No. US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0011
```

밁 S 밁 Ś 밁 S 밁 ક 밁 Ś 문 र् 밁 ঠ 밁 ર્ 밁 S 밁 S 밁 Ś 밁 ঠ

1017 160 957

897 120 837 100 777 80 60

```
1978
                                                                                                                                                                                                                                                                1798
                                                                                                                                                      1918
                                                                                                                                                                                                            1858
                                                                                                                                                                                                                                                                                                                      1738
                                                                                                                                                                                                                                                                                                                                                                           1678
                                                                                                                                                                                                                                                                                                                                                                                                                                1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1018
                 521
                                                                                                                           481
                                                                                                                                                                                 461
                                                                                                                                                                                                                                      441
                                                                                                                                                                                                                                                                                            421
                                                                                                                                                                                                                                                                                                                                                401
                                                                                                                                                                                                                                                                                                                                                                                                     381
                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                              SerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuLeu
                                                          SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                    GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                    AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                           LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro
                                                                                                                                                                                                                                                                             SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn
                                                                                                                                                                                                                                                                                                                                   SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                       SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                            AAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCT
                                                                                                                                                                                                                                                                TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                     TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                             ProSerValProSerValG1nProSerLeuLeuG1uAspSerProLeuValG1nA1aLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT 1497
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                               CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTAGTIGCACTIGTTTAGCTIGGGATCTCCCCGCCTCCGCCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                             420
               540
                                         2097
                                                                    520
                                                                                              2037
                                                                                                                         500
                                                                                                                                                    1977
                                                                                                                                                                                480
                                                                                                                                                                                                           1917
                                                                                                                                                                                                                                     460
                                                                                                                                                                                                                                                                1857
                                                                                                                                                                                                                                                                                          440
                                                                                                                                                                                                                                                                                                                     1797
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              360
                                                                                                                                                                                                                                                                                                                                                                                                                               1677
                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1557
                                                                                                                                                                                                                                                                                                                                                                          1737
                                                                                                                                                                                                                                                                                                                                                                                                    400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1617
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                 Ś
                                             밁
                                                                          Ş
 B
                                                                                                         밁
                                                                                                                               δ
                                                                                                                                                                                                                                                             Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 13
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2098
                                                      244
 304
                                                                                                           184
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                621
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               561
                        41
                                                                                21
                                                                                                                                      ш
```

8 8 8 8

음성 음성

음 성

음 성

중 음

S 밁 S 片 Ś 밁 Ş 밁 5 밁 S 밁 S 밁 S 片 δ 뭐

밁

성 음

```
Sequence 115, Application US/10648593

; Sequence 115, Application US/20040106132A1

; Publication No. US20040106132A1

; GENERAL INFORMATION:

; APPLICANT: Bristol-Myers Squibb Company

; TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR

; TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS

; TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS

; FILE REFERENCE: D0273 NP

; CURRENT ETLING DATE: 2003-08-26

; PRIOR APPLICATION NUMBER: 60/406,385

PRIOR APPLICATION NUMBER: 60/406,385

PRIOR PILLING DATE: 2002-08-27

; NUMBER OF SEQ ID NOS: 557

; SOFTWARE: Patentin version 3.2

; SEQ ID NO 115

; LENGTH: 4790

; TYPE: DNA

; ORGANISM: Homo sapiens

US-10-648-593-115
                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665)
                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                      HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTTCCACCAGCCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCATGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                                                                                                                                                                                      0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                   x US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2532
                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                   (1-4790)
363
                                  60
                                                                         303
                                                                                                               40
                                                                                                                                                      243
                                                                                                                                                                                            20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2277
```

PRIOR FILING DATE: 2000-02-17 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR FILING DATE: 2000-03-16 PRIOR APPLICATION NUMBER: 60/207.454	401 SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe 420 	B 8
CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR FILING DATE: 2003-02-16 PRIOR PRICATION NUMBER: 60/183 319	381 SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe 400 	B 8
ESSMENT, PREVENTION, AND	361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380 	용 성
PTONS	341 CybàlaAbpSerAlaThrSerGluàlaAlaGlyGlnArgProValHisProAlaSerVal 360 	유 성
US-10-357-930-20824 US-10-357-930-20824, Application US/10357930 ; Sequence 20824, Application US/10357930 ; Publication No. US20040259086A1 ; GRMRFRAL TURFORMATION:	321 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	B 8
CY 651 ITELIEGITVALSET 655	301 GlnThrGlyAlaSerGlyProLyeSerLyeLeuLyeLeuLeuHieLeuGluLyeProAen 320 	유 성
641 ArgserArggluGlubeu	281 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	음 성
21 Lyberinfuldybargargericyberinfulcatericyberinfulcatericseroluabu	261 LybargMetAspMetSerLeuaspGlualaTyrargPheValLybGluLybargProThr 280 	B 성
1984 CAGAAGCCAAGTGACAGAGCTGACCAGAGCTGGCATGAAGAGCCCCTTTGAA	241 LeuvalHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260 	B 성
581 ALATYRSerCysSerGInLeuProThrCysGIyAspGInValTyrSerValArgArgArg	221 ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	B 8
561 InroluserserH.spneityrserA.aSerA.aI.leityrGlyGlyGerAlaSerTyrSer	201 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	B 8
541 SerAspileLeuALaProGLnThrSerThrProSerLeuThrSerTserTrpTyrPheAla	181 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	B &
521 Leuserintserdinging steurintlysseralady Leudiy Leubysgiy Triphis	161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	당 성
SOL SELFICIAL HIBARGSERGLYSERVALGINABABNIYEHISINISERFALEUDREGIY	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	문왕
1624 AGCAAGCGATTGCATTCGGTCAGAACCAGCAGGTGGCACCGCCCAGAGGTCCCTTTTA	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140 	유 왕
461 ApplysGluGluAlaSerIleProLysLysLysLeuGlnThrAlaArgProSerAspSerGln	3LeugluLysSerPheAsnSerValHisLeu 1 	음 ઇ
QY 441 LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 4	CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 1	유 왕
Qy 421 SerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 4	61 ABPLYSVALLEUILEThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80 	음 성

٠.

PRIOR APPLICATION NUMBER: 60/207,454

õ

```
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FeatUSQ for Windows Version 4.
SEQ ID NO 20824
LENGTH: 5145
TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc feature
OTHER INFORMATION: n = A,T,C or G
US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred.
Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-357-930-20824 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           No.:
                                                                        1129
                                                                                                                               1069
                                                                                                                                                                                       1009
                                             201
                                                                                                   181
                                                                                                                                                          161
                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                    889
                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                          829
                                                                                                                                                                                                                                                                                                                                                                                                                 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       589
                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                      GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                         LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                   GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCCCATGAGATGATTGGAAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                            GGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0
3406.00
99.85%
99.70%
99.65%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0011
                                                                                                                                                        180
                   1248
                                            220
                                                                        1188
                                                                                                  200
                                                                                                                                                                                       1068
                                                                                                                                                                                                                160
                                                                                                                                                                                                                                            1008
                                                                                                                                                                                                                                                                        140
                                                                                                                                                                                                                                                                                                                                                         888
                                                                                                                                                                                                                                                                                                                                                                                                               828
                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                   948
                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648
 Ś
                      밁
                                                Ş
                                                                                   밁
                                                                                                     8
                                                                                                                                                              Ş
                                                                                                                                  밁
                                                                                                                                                                                                밁
                                                                                                                                                                                                                   γQ
                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 日
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                              2269
                                                                                     2209
                                                                                                                                           2149
                                                                                                                                                                                                   2089
                                                                                                                                                                                                                                                                                                                1969
                                                                                                                                                                                                                                                        2029
                                                                                                                                                                                                                                                                                                                                                                      1909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1729
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1249
  581
                                                      561
                                                                                                               541
                                                                                                                                                                      521
                                                                                                                                                                                                                             501
                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                          461
                                                                                                                                                                                                                                                                                                                                                                                                 441
                                                                                                                                                                                                                                                                                                                                                                                                                             1849
                                                                                                                                                                                                                                                                                                                                                                                                                                                       421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    381
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
{\tt AlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgArg}
                                             ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrSer
                                                                                                  SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAla
                                                                                                                                                          LeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHis
                                                                                                                                                                                                                   SerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheGly
                                                                                                                                                                                                                                                                          SerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuLeu
                                                                                                                                                                                                                                                                                                              GATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCCAG
                                                                                                                                                                                                                                                                                                                              AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerGln
                                                                                                                                                                                                                                                                                                                                                                                     LysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerPro 460
                                                                                                                                                                                                                                                                                                                                                                                                                                          SerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsn 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                           CTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGCAC
                                                                                                                                                                                                                                                         AGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTTTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                     {	t TCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTGCC}
                                                                                                                                                                                                                                                                                                                                                                                                                           TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGCTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
  600
                                                                                     2268
                                                                                                               560
                                                                                                                                           2208
                                                                                                                                                                                                   2148
                                                                                                                                                                                                                                                         2088
                                                                                                                                                                                                                                                                                                                                                                      1968
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1788
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                2028
                                                                                                                                                                                                                                                                                                                                                                                                                             1908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1848
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1668
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1608
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1548
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
```

밁 Ş 밁 В Ś

5

S

片 ঠ

밁

5 멍 ঠ 밁 5 밁 Ś 밁 Ś 문 Ś

밁

1 MetAlaHi8GluMetIleGlyThrGlnIleValTh 	99.65% Indels: 18 Gaps: 665) x US-10-357-930-20969 (1-51	0 3406.00 larity: 99.85% imilarity: 99.70%	INFORMATION: n 930-20969	ORGANISM: Homo sapiens FEATURE: FAME/KEY: misc feature IOCATION: 1 5144 5145	FastSEQ for 20969 5145	FILING DATE: 2000-07-18 APPLICATION NUMBER: 60/255, FILING DATE: 2000-12-13 B OF SEO ID NOS: 62232	FILING DATE: 2000-05-25 APPLICATION NUMBER: 60/211, FILING DATE: 2000-06-09 APPLICATION NUMBER: 60/219	FILING DATE: 2000-02-17 APPLICATION NUMBER: 60/189, FILING DATE: 2000-03-16 APPLICATION NUMBER: 60/207,	FILING DATE: 2003-02-04 PPLICATION NUMBER: 09/785,276 ILING DATE: 2003-02-16 PPLICATION NUMBER: 60/183,319	OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND OF INVENTION: HUMAN PROSTATE CANCER REFERENCE: MRI-007BCN NIMBER 118/10/157 930		US-10-357-930-20969 ; Sequence 20969, Application US/10357930 ; Publication No. US20040259086A1	OF 116116611W61561 005 Db 2569 ATCATTGAGGTCTCC 2583 RESITT 15	2509 AGGTCACGGAAGAGCTGGGGAAAGTGGGCAGTCAGTTTTTCGGGCAGCATGGAA	CV 641 AYGGATATGGINGINIANGSVINATGGATGATGATGATGATGATGATGATGATGATGATGATG	2389 CAGAAGCCAAGTGACCAGGCTGACCAGGCTGGCATGAAGAGACCCCTTTGAA	Db 2329 GCCTACAGCTGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGG 2388
Qy 361 Db 1669 Qy 381	Qy 341 рь 1609	Qy 321 Db 1549	Qy 301 Db 1489	Qy 281 Db 1429	Qy 261 Db 1369	Qy 241 Db 1309	QY 221 Db 1249	Qy 201 Db 1189	Οy 181 Db 1129	Qy 161 Db 1069	Qy 141 Db 1009	Qy 121 Db 949	Qy 101 Db 889	Qy 81 Db 829	Qy 61 Db 769	Qy 41 Db 709	Qy 21 Db 649
ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaLeu 380	. CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360 	. GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro 340 	. GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn 320 	IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIlysIlysAsn 300	LysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280 	LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240 	IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu 220 	GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200 	ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	LeualaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	L AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100 	L ASPLYSVALLEUILEThrGluLeUILEGInHisSerAlaLysHisLysValAspIleAsp 80	HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40

1729 401 1789 421 1849 441 1909 441 1969 501 2029 501 2089 52149 22209 581 2329 601 23389 661 2569 661	Search Job ti	뮍	Ş	В	Ş	뭉	Ş	뭥	δ	탕	Ş	뭥	Ş		\$	뮹	Ş	문	Ş	뮹	Ş	용	8	문	γQ	망	8	문	8	용
	earch completed: February 14, 2005, 14:04:1 ob time : 940.813 secs	2569 ATCATTGAGGTCTCC 258	661 IleIleGluValSer 66	2509 AGGTCACGGGAAGAGTGGGGAAAAGTGGGCAGTCAGTCTAGCTTTTCGGGCAGCA	641	2449	621	2389 CAGAAGCCAAGTGACAGAGCTGACTCGCGGCCGAGCTGGCATGAAGAGAG	601 GlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSe	2329	581	2269 ACAGAGTC	561 ThrGluSe	2209 TCGG#	541 SerAs	2149	521	2089 TCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTT	501	2029	481	1969 GATAAGGAAGCCAGCATCCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAC	461 AspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSe	1909 AAGCTATG	441 LysLeuCy	1849 TCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGAC	421 SerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyTh	1789 TCTCTGGATAT	401 SerLeuAspIl	1729 AGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTG
				 3GAA 256	99 n	C 250	n 64	244	62	238	60	232	58	226	56	C 220	- 6 54	TCGGC 214	Y 52	A 208	- E 50	G 202	48	196	46	CAAC 190	rAsn 44	C 184	-0 42	 CITC 178

```
Title:
Perfect score:
Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Minimum
Maximum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              OM protein - protein search, using sw model
                  222222211111111
2222221111111111
265432109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                88
          1552

654.5

654.5

654.5

6654.5

6654.5

661.9

661.9

46.6

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

425.4

42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         seq.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length: 0 length: 20000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Issued_Patents_AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfIles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BLOSUM62
Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      513545 seqs, 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             February 9, 2005, 12:00:17; Search time 19.363 Seconds (without alignments) 1164.285 Million cell updates/sec
          MAHEMIGTQIVTERLVALLE......PNFNFLGQLLDYEKKIKNQT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length
              6655
6655
11700
11700
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11555
11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BB
                                       US-09-816-494-2
US-09-544-716-114
US-09-544-716-114
US-09-557-921-15
US-09-557-921-17
US-09-557-921-2
US-09-557-921-2
US-09-955-732A-6
US-09-955-732A-6
US-09-955-732A-6
US-09-949-016-8486
US-09-371-671B-11
US-08-590-2379-6
US-09-702-705-805
US-09-702-705-805
US-09-702-705-805
US-09-702-705-827
US-09-736-457-827
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-805
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
US-09-614-124B-807
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
Sequence 2, Appli
Sequence 9121, Appli
Sequence 14, Appli
Sequence 15, Appli
Sequence 16, Appli
Sequence 6, Appli
Sequence 2, Appli
Sequence 11, Appli
Sequence 6, Appli
Sequence 11, Appli
Sequence 11, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 805, Appli
Sequence 827, Appli
Sequence 827, Appli
Sequence 805, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 807, Appli
Sequence 808, Appli
Sequence 5, Appli
Sequence 5, Appli
Sequence 24, Appli
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Description
```

밁

301 QT 302

i Ś	B &	β Q	Db Qy	B 8	B &	Z m O	US-1
						Query M Best Lo Matches	28 4 29 40 30 409 31 4 33 34 43 37 35 3 36 3 37 3 38 3 41 346 42 346 44 346 44 346 45 346 45 346 47 346 48 346 49 34 40 3 40 3 41 34 42 34 43 34 44 34 45 34 46 49 47 34 48 34 49 34 49 34 40 34 40 34 41 34 42 34 43 34 44 34 45 34 46 34 47 34 48 34 49 34 49 34 40 34 40 34 41 34 42 34 43 34 44 34 45 34 46 34 47 34 48 34 48 34 49 34 49 34 49 34 49 34 40 34 4
301 QT	41	181 QC	121 LAG 121 LAG	61 DR	1 1 3—3	/ Match Local Simi mes 300;	28 415 26.5 29 409.5 26.2 31 409 26.2 31 409 26.2 31 409 26.2 32 409 26.2 33 408 26.1 34 39 26.2 357 22.8 36 357 22.8 37 357 22.8 38 357 22.8 39 357 22.8 40 357 22.8 41 346.5 22.2 44 346.5 22.2 45 346.5 22.2 46 346.5 22.2 47 346.5 22.2 48 346.5 22.2 49 346.5 22.2 49 346.5 22.2 49 346.5 22.2 49 346.5 22.2 49 346.5 22.2 49 346.5 22.2 49 346.5 22.2 40 346.5 22.2 41 346.5 22.2 42 346.5 22.2 43 346.5 22.2 44 346.5 22.2 45 346.5 22.2 46 346.5 22.2 47 346.5 22.2 48 346.5 22.2 49 3
302	E	NGIGYVL	GFAE GFAE	KVLITELI KVLITELI	Mahemigto Mahemigto	nilarity Conserva	415 26.5 367 4 US 409 26.2 313 2 US 409 26.2 314 4 US 409 26.2 314 3 US 409 26.2 314 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 357 22.8 302 4 US 346.5 22.2 168 4 US 346.5 22.2 168 4 US 346.5 22.2 168 4 US 346.5 22.2 168 4 US 346.5 22.2 168 4 US 346.5 22.2 168 2 U
	RSATIAI RSATIAI	NASYTCPI NASNTCPI	FSRCFPGLC	ITELIQHSAKHKVD ITELIQHSAKHKVD	IVTERLVAL	99.2% 99.3% vative	367 4 US 449 4 US 314 3 US 314 3 US 314 3 US 314 4 US 393 2 US 392 4 US 393 2 US 168 4 US 168
	ISRSATIAIAYIMKRMDMSLDEAYRFVKEKRFTIS 	QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDF 	EGKSTLVPTC	VDIDCSQKVVVYDQSSQDVASLSSDCFI 	mahemigtqivterlvallesgtekvllidsrpfveyntshilbainincsklmkrrlog 	; Score 1552; DB 4; L; Pred. No. 3.9e-161; 1; Mismatches 1;	-09-919-497-60 -09-949-016-10840 -08-990-379-7 -09-164-133-22 -09-949-016-11488 -08-990-379-4 -09-702-705-806 -09-614-1248-806 -09-658-824-806 -09-658-824-806 -09-949-016-6494 -09-554-716-13 -09-554-716-13 -09-554-357-16 ALIGNMENTS ALIGNMENTS ALIGNMENTS 94 94 191, NOVEL DUAL SPEC MOLECULES AND USES 9/816,494 191,858
	SPNFNFLGQLLDYEKKIKN 300 SPNFNFLGQLLDYEKKIKN 300	#LDKSVDFIEKAKASNGCV 240	ISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180 SQPCLPVANIGPTRILPNLYLGCQRDVLNKELM 180	CFLTVLLGKLEKSFNSVHL 120 	ILBAININCSKLMKRRLQQ 60	Length 665; Indels 0; Gaps 0;	Sequence 60, Appl Sequence 10840, A Sequence 7, Appl1 Sequence 22, Appl Sequence 22, Appl Sequence 4, Appl Sequence 806, App Sequence 806, App Sequence 806, App Sequence 806, App Sequence 806, App Sequence 806, App Sequence 806, App Sequence 13, Appl Sequence 13, Appl Sequence 13, Appl Sequence 16, Appl Sequence 16, Appl Sequence 16, Appl

```
GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF

TILE REFERENCE: CL001307

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-10-20

PRIOR PILING DATE: 2000-10-20

PRIOR PILING DATE: 2000-10-03

PRIOR PILING DATE: 2000-10-03

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR PILING DATE: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 9121

LEUGTH: 661

TYPE: PRT

ORGANISM: Human

US-09-949-016-9121
                                                                                                                                                                                                                                                                                                                                             RESULT 3
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
; LENGTH: 170
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-544-716-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 2
US-09-949-016-9121
                                                                                               GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-9 DUAL-SPECIFICITY PHOSPHATASE
TITLE REFERENCE: 200125.415
CURRENT APPLICATION NUMBER: US/09/544,716
CURRENT FILING DATE: 2000-04-10
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local S
Matches 190
                                                                                                                                                                                                                                                                                                        Sequence 14, Application US/09544716 Patent No. 6492157
                                                                                   SEQ ID NO 14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 9121, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 / Match 63.2%; Score 989; DB 4; Length 661; Local Similarity 63.1%; Pred. No. 2.1e-99; nes 190; Conservative 55; Mismatches 54; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           277 QVIVHCLAGISRSATIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERSL 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 MAHEMIGTQIV-TERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININGSKLMKRRLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                          К 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LLAGGFAEFSRCFPGLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKE 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAGDRLPRKVMDAKKLASILRGGPGGPLVIDSRSFVEYNSWHYLSSVNICCSKLVKRRLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  K 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LMTQNGISYVLNASNSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ILTGGFATFSSCFPGLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QGKVTIAELIQPAARSQVEATEPQDVVVYDQSTRDASVLAADSFLSILLSKLDGCFDSVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QDKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVH 119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              55;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        59
```

```
APPLICANT: Luche, Ralf M.

APPLICANT: Wei, Bo

ITILE OF INVENTION: DSP-5 DUAL-SPECIFICITY PHOSPHATASE

FILE REFERENCE: 200125.413

CURRENT FILING DATE: 2000-04-24

NUMBER OF SEQ ID NOS: 22

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 17

LENGTH: 170

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY
FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
NUMBER OF SEO ID NOS: 20
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 15
                                      US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                     US-09-564-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                         RESULT 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 4
US-09-557-921-15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                        Sequence 17, Application US/09564357 Patent No. 6645753 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Matches 121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 15, Application US/09557921 Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LENGTH: 170
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           193 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNENFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    193 YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61 NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          61 NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1 GLCEGKPAALLPMSLSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                               TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GLCEGKPAALLPMSLSOPCLPVPSVGLTRILPHLYLGSOKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DSP-10 DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41.8%; Score 654.5; DB 472.5%; Pred. No. 1.4e-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41.8%;
41.8%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 654.5; DB
Pred. No. 1.4e-63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
```

Query Match

Score 654.5;

DΒ

4;

Length 170;

```
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-15 DUAL-SPECIFICITY PHO
FILE REFERENCE: 200125.433
CURRENT APPLICATION NUMBER: US/09/955,732A
CURRENT FILING DATE: 2001-09-18
NUMBER OF SEQ ID NOS: 29
SOPTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 16, Application US/09619380
Patent No. 6649391
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-11 DUAL SPECIFICITY PHOFILE REFERENCE: 200125.418
CURRENT APPLICATION NUMBER: US/09/619,380
CURRENT FILING DATE: 2000-07-19
                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                               RESULT 7
US-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                 US-09-955-732A-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-09-619-380-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                           SEQ ID NO 6
LENGTH: 155
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 22
SOFTWARE: PastSEQ for Windows Version
SEQ ID NO 16
LENGTH: 170
Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                Sequence
                                                                                                                                                                                                                                                                  Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Matches 121;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                      134 GLCEGK-STLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                6, Application US/09955732A
o. 6825021
                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   134 GLCEGK-STLVFTCISQPCLFVANIGPTRILFNLYLGCQRDVLNKELIQQNGIGYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                             TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSA 252
                                                                                                                                                                                                                                                                                                                                                       TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                      NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLCEGKPAALLPMSLSOPCLPVPSVGLTRILPHLYLGSOKDVLNKDLMTONGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TIAIAYIMKTMGMSSDDAYRFVKDRRPSISPNFNFLGQLLEYERTLK 167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NSCPKPDFICESRFMRVPINDNYCEKLLPWLDKSIEFIDKAKLSSCQVIVHCLAGISRSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GLCEGKPAALLPMSLSOPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNAS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Conservative
   39.6%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41.8%; Score 654.5; DB 4; 72.5%; Pred. No. 1.4e-63; ive 27; Mismatches 18;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             72.5%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pred. No. 1.4e-63; 7; Mismatches 18;
   Score 619; DB 4;
Pred. No. 9.3e-60;
                                                                                                                                                                                                       PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                    252
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                192
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F
```

```
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-557-921-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
US-09-557-921-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: FA
SEQ ID NO 2
LENGTH: 482
                                                                                                                               GENERAL INFORMATION:

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND
                                                                                                                                                                                                                           Sequence 8486, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 30.0%;
Best Local Similarity 35.9%;
Matches 107; Conservative 6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-10 DUAL-SPECIFICITY
FILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT APPLICATION NUMBER: 200-04-20
NUMBER OF SEQ ID NOS: 20
NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     sequence 2, Application US/09557921
Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches
FILE REFERENCE: CL001307
CURRENT APPLICATION NUMBER: US/09/949,016
CURRENT FILING DATE: 2000-04-14
PRIOR APPLICATION NUMBER: 60/241,755
PRIOR FILING DATE: 2000-10-20
PRIOR APPLICATION NUMBER: 60/237,768
                                                                                                                                                                                                                                                                                                                                                                    407
                                                                                                                                                                                                                                                                                                                                                                                                            243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    173 VIIDCRPFMEYNKSHIQGAVHINCADKISRRRLQQGKITVLDLISCREGKDSFKRIFSKE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        351 VINVTTHLPLYHYEKGLF----NYKRLPATDSNKQNLRQYFEEAFEFIBEAHQCGKGLLI 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   293 CREVGGGASAASSLLPQPI--PTTPDIENAELTPILPFLFLGNEQDAQDLDTMQRLNIGY 350
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 SDDAYRFVKORRPSISPNFNFLGQLLEYERTLK 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         113;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  27 LLIDSRPFVEYNTSHILBAININCS-KLMKRRLQQDKVLITELIQ-HSAKHKVDIDCSQK 84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 LSQPCLPVPSVGLTRILPHLYLGSQKDVLNKDLMTQNGISYVLNASNSCPKPDFICESRF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ISOPCLPVANIGPTRILPNLYLGCORDVLNKELIOONGIGYVLNASYTCPKPDFIPESHF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   VLNAS----YTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLV 242
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -----STLVPTCISQPCLP-VANIGPTRILPNLYLGCQRDVLNKELIQQNGIGY 187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IIVYDENTNEPSRVMPSQPLHIVLESLKREGKEPLVLKGGLSSFKQNHENLCDNSLQLQE 292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIK 299
                                                                                                                                                                                                                                                                                                                                                                    HCQAGVSRSATIVIAYLMKHTRMTMTDAYKFVKGKRPIISPNLNFMGQLLEFEEDLNN 464
                                                                                                                                                                                                                                                                                                                                                                                                            HCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    VVVXDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHLLAGGFAEFSRCFPGLCEGK-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             65;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           25;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 469; DB 4;
Pred. No. 1.4e-42;
5; Mismatches 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length 482;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             30;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0;
                                                                                                                                        USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
```

```
Ś
                                  밁
                                                                                                                                                                                                                                                                     TITLE OF INVENTION: TRANSGENIC PLANTS EXPRESSING A
TITLE OF INVENTION: DUAL-SPECIFICITY MAPK PHOSPHATASE AND
FILE REFERENCE: 00786/370002
CURRENT APPLICATION NUMBER: US/09/371,671B
CURRENT FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 60/155,934
PRIOR FILING DATE: 1999-01-14
PRIOR FILING DATE: 1999-01-14
PRIOR FILING DATE: 1999-01-14
PRIOR FILING DATE: 1998-01-19
SEQUENCE: FASTEST OF SECUENCE: 60/095,938
PRIOR FILING DATE: 1998-08-10
NUMBER: OF SECUENCE: 10 NOS: 11
SOFTWARE: FASTEST FOR WINDOWS Version 4.0
SEQUENCE: 10 NOS: 11
SOFTWARE: FASTEST FOR WINDOWS VERSION 4.0
                                                                  5
                                                                                                                                                                                              ; TYPE: PRT ; ORGANISM: Mus musculus US-09-371-671B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 10
US-09-371-671B-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT
; ORGANISM: Human
US-09-949-016-8486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-10-03
PRIOR APPLICATION NUMBER: 60/231,498
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 207012
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 8486
LENGTH: 491
                                                                                                                   Query Match
Best Local Similarity
Matches 104; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 11, Application Patent No. 6548743
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Sheen, Jen
APPLICANT: Chiu, Wan-Ling
                                                                                                                                                                                                                                                           LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     137
      75
                                          13
                                                                             15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            tch 29.8%; Score 466.5; DB 4; al Similarity 34.1%; Pred. No. 2.7e-42; 110; Conservative 63; Mismatches 105;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSA-KHKV
                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              78
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       EKRPTISPNENFLGQLLDYEKKI 298
|: ||||||:|: :
MKKSNISPNENFMGQLLDFERTL 457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --PTRILPNLYLGCQRDVLNKELIQQNGIGYVLNASYTCPKP-DFIPESHFLRVPVNDSF
  HKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKL--EKSFNSVHLLAGGFAEFSRCF
                                      LRALLREGAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRRAKGAMGLEHIVPNAELR 72
                                                                           LVALLESGTEKVILIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SQNLSQFFPEAISFIDEARGKNCGVLVHCLAGISRSVTVTVAYLMQKLNLSMNDAYDIVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SFPVEILPFLYLGCAKDSTNLDVLEEFGIKYILNVTPNLPNLFENAGEFKYKQIPISDHW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CE--TNLDGSCSSSPPLPVLGLGGLRISSDSSSDIESDLDRDPNSATDSDGSPLSNSQP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CEGKSTLVPTC-ISOPCLPVANIG------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TRRCGTDTVVLYDESSSDWNENTGGESVLGLLLKKLKDEGCRAFYLEGGFSKFQAEFSLH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DIDC-SQKVVVYDQSSQD-VASLSSDCFLTVLLGKLEKSFNSVHLLAGGFAEFSRCFPGL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LELGNERLLLMDCRPQELYESSHIESAINVAIPGIMLRRLQKGNLPVRALFTRGEDRDRF
                                                                                                                   Conservative
                                                                                                             27.2%; Score 425; DB 4; Length 314; 34.3%; Pred. No. 5e-38; tive 48; Mismatches 129; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US/09371671B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AND USES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              45;
                                                                                                                   22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    215
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               158
                                                                                                                 σ
```

```
S
                                                                   밁
                                                                                                  Ś
                                                                                                                                      문
                                                                                                                                                                     Ś
                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-08-990-379-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-08-990-379-6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: PatentIn Ver. SEQ ID NO 6
                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Patent No. 5998188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: Mitogen Activated Protein Kinase Phosphatase cDNAs TITLE OF INVENTION: Their Biologically Active Expression Products FILE REFERENCE: 4104-000320USA CURRENT APPLICATION NUMBER: US/08/990,379 CURRENT FILING DATE: 1997-12-15 EARLIER PPLICATION NUMBER: PCT/US96/10402 EARLIER FILING DATE: 1996-06-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EARLIER APPLICATION NUMBER: 60/000,263
EARLIER FILING DATE: 1995-06-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Stork, Philip J
APPLICANT: Misra-Press, An
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH:
 310
                                  296
                                                                   250
                                                                                                                                        191
                                                                                                                                                                                                          133
                                                                                                                                                                                                                                            133
                                                                                                  236 SNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              191
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           176 NKELIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKA 235
                                                                                                                                                                                                                                                                               73
                                                                                                                                                                                                                                                                                                                 75
                                                                                                                                                                                                                                                                                                                                                                                                                       104;
                                                                                                                                                                                                                                                                                                                                                                                     15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 73
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                367
                                                                   AGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFSFMGQLLQFE
SQV 312
                                KKI 298
                                                                                                                                                                       NKELIQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKA
                                                                                                                                                                                                                                            PGLCEGKSTLVPTCISQP------CLPVANI-----GPTRILPNLYLGCQRDVL
                                                                                                                                                                                                                                                                             GRILLAGAYHAVVILLDERSASIDGAKRDGTLALAAGALCREARSTQVFFLQGGYEAFSASC 132
                                                                                                                                                                                                                                                                                                                                                                                   LVALLESGTEKVILIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK
                                                                                                                                    RKDMLDALGITALINVSANCPN-HFEGHYQYKSIPVEDNHKADISSWFNEAIDFIDSIKD
                                                                                                                                                                                                           PELCSKQST--PTGLSLPLSTSVPDSAESGCSSCSTPLYDQGGPVEILSFLYLGSAYHAS
                                                                                                                                                                                                                                                                                                                HKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKL--EKSFNSVHLLAGGFAEFSRCF 132
                                                                                                                                                                                                                                                                                                                                                    LRALLREGAAQCLLLDCRSFFAFNAGHIAGSVNVRFSTIVRRAKGAMGLEHIVFNAELR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SNGCVLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYE 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SQV 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/08990379
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      KKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGGRVFVHCQAGISRSATICLAYLMRTNRVKLDEAFEFVKQRRSIISPNFSFMGQLLQFE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RKDMLDALGITALINVSANCPN-HFEGHYQYKSIPVEDNHKADISSWFNEAIDFIDSIKD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PELCSKQST--PTGLSLPLSTSVPDSAESGCSSCSTPLYDQGGPVEILSFLYLGSAYHAS 190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PGLCEGKSTLVPTCISQP-----CLPVANI-----GPTRILPNLYLGCQRDVL 175
                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ds.
                                                                                                                                                                                                                                                                                                                                                                                                                                      27.2%; Score 425; DB 2; 34.3%; Pred. No. 6.3e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Anita
                                                                                                                                                                                                                                                                                                                                                                                                                       48;
                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                       129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 367;
                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                       22;
                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                         235
                                                                     309
                                                                                                     295
                                                                                                                                                                                                           190
                                                                                                                                                                                                                                                                                                                                                    72
                                                                                                                                                                                                                                                                                                                                                                                     74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            249
```

```
र्
                                                                                                 밁
                                                                                                                         5
                                                                                                                                                              밁
                                                                                                                                                                                             ई
                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                   ; MOLECULE TYPE: peptide US-08-530-290-23
                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-08-530-290-23
                                                                                                                                                                                                                                                                                                    Matches
                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Patent No. 5958721
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TELEFAX: (415) 576-03
INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9-
PILING DATE: 10-FEB-1994
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELECOMMUNICATION INFORMATION: TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILING DATE: 07-APR-1993
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO PCT/GB94/00694
FILING DATE: 31-MAR-1994
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/0:
FILING DATE: 14-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: Hughes, David Anthony
TITLE OF INVENTION: Methods for ?
TITLE OF INVENTION: Therapeutic /
NUMBER OF SEQUENCES: 24
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STREET:
                                                                                                                                                                                                                                                                                                                                                                                                    STRANDEDNESS:
TOPOLOGY: 15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REFERENCE/DOCKET NUMBER: 08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version
                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: amino acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                   LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ADDRESSEE:
                               217
                                                                180
                                                                                                 157
                                                                                                                                  135
240 VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       23, Application US/08530290
o. 5958721
                                                                                                                                                                   97
                                                                                                                                                                                                    77
                                                                                                                                                                                                                                  39
                                                                                                                                                                                                                                                                   19
                                                                                                                                                                                                                                                                                                    99;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  San Francisco
                                                                                                                                                                                                                               LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK
                                                                                                                                LCEGKSTL-----VPTCISQP----CLPVA----NIGPTRILPNLYLGCQRDVLNKEL 179
                               LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                              IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                 FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
                                                                                                                                                                  LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  California
                                                                                                                                                                                                                                                                                                                                                                                                                                                     394 amino acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Two Embarcadero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (415)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Marshall, Christopher John Ashworth, Alan
                                                                                                                                                                                                                                                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ashworth,
                                                                                                                                                                                                                                                                                                                                                                                                        linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Townsend and Townsend and Crew LLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           UMBER: GB 9307250.2
07-APR-1993
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 576-0300
576-0300
NO: 23:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Methods for Screening of 
Therapeutic Activity and
                                                                                                                                                                                                                                                                                                                27.2%; Score 425; DB 2; Length 394; 33.1%; Pred. No. 7e-38;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GB 9402573.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           us/08/530,290
                                                                                                                                                                                                                                                                                                    62;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          084611-000000US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Center, Eighth Floor
                                                                                                                                                                                                                                                                                                    Mismatches 116; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Substances for
Yeast for Use Therein
                                                                                                                                                                                                                                                                                                    22;
                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                  96
                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence
```

```
; SOFTWARE: FastSEQ for Wi
; SEQ ID NO 805
; LENGTH: 394
; TYPE: PRT
; ORGANISM: Homo sapiens
US-09-702-705-805
                                                                                                                                                                                                                                                                                                                      RESULT 14
US-09-702-705-827
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 13
US-09-702-705-805
                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                           GENERAL INFORMATION:
                                                                                                                                                                                                                                                                              Sequence 827, Application US/09702705 Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 805, Application Patent No. 6504010
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: FAM, Liqun
APPLICANT: FAM, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION NUMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
APPLICANT: Mannion, Jane
APPLICANT: Fan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C14
                                                                                   APPLICANT:
APPLICANT:
                                                                                                                               APPLICANT:
                                                                                                                                                 APPLICANT:
                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240 VLVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180 IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       135 LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 97 LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        77 VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    39 LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99;
                                                                               Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                          VLVHCQAGISRSATICLAYLMMKKRVRLEBAFBFVKQRRSIISPNFSFMGQLLQFBSQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                  Bangur, Chaitan
Lodes, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    27.2%; Score 425; DB 4 ilarity 33.1%; Pred. No. 7e-38; Conservative 62; Mismatches 1
                                                                                                                                                                                                                                     Tongtong
                                                                                                                                                                                                            Chaitanya
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US/09702705
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      62; Mismatches 116; Indels
                                                                                                                                                                                                                 ß
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 4; Length 394;
                                            FOR THE THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR THE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             THERAPY AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      22;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               216
```

```
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 1864
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 805
LENGTH: 394
TYPE: PRT
ORGANISM: Homo sapiens
US-09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/09/702,705; CURRENT FILING DATE: 2000-10-30; NUMBER OF SEQ ID NOS: 1833; SOFTWARE: FastSEQ for Windows Version 3.0; SEQ ID NO 827; LENGTH: 394; TYPE: PRT; ORGANISM: Homo sapiens
US-09-702-705-827
                                         밁
                    Ś
                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 15
US-09-736-457-805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 8 Patent No.
                                                                                                                       Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match 27.2%; Score 425; DB 4; L4 Best Local Similarity 33.4%; Pred. No. 7e-38; Matches 100; Conservative 64; Mismatches 113;
                                                                                                                                        Best Local
                                                                                                                                                      Query Match
                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: COMPOSITIONS AND METHODS TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER FILE REFERENCE: 210121.478C15
                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              805, Application US/09736457
o. 6509448
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  135
                        77
                                                    39 LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR 96
                                                                       19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   19 LESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELI--QHSAKHK 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                     Similarity
VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Fanger, Gary
Vedvick, Tom
Carter, Darrick
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VLVHCQAGISRSATICLAYLMMKKRVRLEEAFEFVKQRRSIISPNFSFMGQLLQFESQV 334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKI 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FCSKTKALAAIPPPVPPSATEPLDLGCSSCGTPLHDQGGPVEILPFLYLGSAYHAARRDM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LPSG-GKCLLLDCRPFLAHSAGYILGSVNVRCNTIVRRR-AKGSVSLEQILPAEEEVRAR
                                                                                                                                                                                                                                                                         FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LDALGITALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADISSWFMEAIEYIDAVKDCRGR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LCEGKSTL-----VPTCISQP-----C-LPVANI-GPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               VDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSF--NSVHLLAGGFAEFSRCFPG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                        Fan, Liqun
Wang, Aijun
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Bangur, Chaitar
Lodes, Michael
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Wang, Tongtong
Bangur, Chaitanya
                                                                                                                                                                                                                                                                                                                                                                                                                         Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                              Retter, Marc
                                                                                                                    27.2%; Score 425; DB 4; I ilarity 33.1%; Pred. No. 7e-38; Conservative 62; Mismatches 116;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                      DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 4; Length 394;
                                                                                                                                                                                                                                                                                                                                                                            FOR
                                                                                                                                                                                                                                                                                                                                                                             THE THERAPY AND
                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22;
                                                                                                                     22;
                                                                                                                     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               275
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 96
                                                                                                                     8
```

```
δ
                                                                                           밁
                                                                                                                                Ş
                                                                                                                                                                                 망
                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                 밁
                                              240
                                                                                                                                                                                        157
                                                                                           217 LDALGÍTALLNVSSDCPN-HFEGHYQYKCIPVEDNHKADÍSSWFMEAIEYÍDAVKDCRGR 275
                                                                                                                                          180 IQQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGC 239
                                                                                                                                                                                                                                                                                    97
                             VLVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNF1GQLLDYEKKI
                                                                                                                                                                                      FCSKTKALAAIPPPVPPSATEPLDLDCSSCGTPLHDQEGPVEILPFLYLGSAYHAARRDM 216
VLVHCQAGISRSATICLAYLMMKKRVRLEBAFBFVKQRRSIISPNFSFMGQLLQFBSQV 334
                                                                                                                                                                                                                                  LCEGKSTL-----VPTCISQP----CLPVA-----NIGPTRILPNLYLGCQRDVLNKEL 179
                                                                                                                                                                                                                                                                                    LRSGLYSAVIVYDERSPRAESLREDSTVSLVVQALRRNAERTDICLLKGGYERFSSEYPE 156
                                                 298
```

Search completed: February 9, 2005, 12:13:09
Job time: 20.363 secs

```
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum DB seq length: 0
Maximum DB seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                       9:
10:
11:
12:
13:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   February 9, 2005, 12:09:54; Search time 57.152 Seconds (without alignments) 1721.062 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1373511 seqs, 325702437 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gapop 10.0 , Gapext 0.5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Published Applications AA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MAHEMIGTQIVTERLVALLE......PNFNFLGQLLDYEKKIKNQT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
/cgn2_6/ptodata/1/pubpaa/US09A_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/US10B_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/1/pubpaa/USO7_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO6_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO6_PUBCOMB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO7_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
/cgn2_6/ptodata/1/pubpaa/USO8_NEW_PUB.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1373511
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

:	1552	1552	1552	1552	1552	1552	1552	1552	1552
į									
15	9	9	15	15	15	15	15	16	16
US-10-072-012-258	US-09-816-494-2	US-09-964-277-2	US-10-377-072-26	US-10-072-012-680	US-10-168-506-14	US-10-343-357-7	US-10-257-026-2	US-10-648-593-240	US-10-648-593-247
Sequence 258, App	Sequence 2, Appli	Sequence 2, Appli	Sequence 26, Appl	680	14,	7,	2	24	247,
	99.2 662 15 US-10-072-012-258 Sequence	1552 99.2 662 15 US-10-072-012-258 1552 99.2 665 9 US-09-816-494-2	1552 99.2 662 15 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-816-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence	1552 99.2 662 15 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-816-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence	1552 99.2 662 15 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-914-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-072-012-680 Sequence	1552 99.2 662 15 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-816-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-072-012-680 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence	1552 99.2 662 15 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-816-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-072-012-680 Sequence 1552 99.2 665 15 US-10-072-012-680 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-343-357-7 Sequence	1552 99.2 665 9 US-10-072-012-258 Sequence 1552 99.2 665 9 US-09-916-494-2 Sequence 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-378-072-26 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-343-357-7 Sequence 1552 99.2 665 15 US-10-257-026-2 Sequence	1552 99.2 665 9 US-09-816-494-2 1552 99.2 665 9 US-09-816-494-2 1552 99.2 665 9 US-09-816-277-2 1552 99.2 665 9 US-09-964-277-2 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-257-026-2 1552 99.2 665 15 US-10-257-026-2 1552 99.2 665 16 US-10-648-593-240 Sequence
1552 99.2 665 9 US-09-816-494-2 1552 99.2 665 9 US-09-964-277-2 Sequence 1552 99.2 665 15 US-10-377-072-26 Sequence 1552 99.2 665 15 US-10-372-012-680 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-343-357-7 Sequence 1552 99.2 665 15 US-10-243-357-7 Sequence 1552 99.2 665 16 US-10-648-593-240 Sequence 1552 99.2 665 16 US-10-648-593-247 Sequence	1552 99.2 665 9 US-09-964-277-2 Sequence 2, 1552 99.2 665 15 US-10-377-072-26 Sequence 26, 1552 99.2 665 15 US-10-072-012-680 Sequence 26, 1552 99.2 665 15 US-10-168-506-14 Sequence 14, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-343-357-7 Sequence 2, 1552 99.2 665 15 US-10-648-593-240 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 2, 1552 99.2 665 16 US-10-648-593-	1552 99.2 665 15 US-10-377-072-26 Sequence 26 1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-168-506-14 Sequence 7, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-648-593-240 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 2,	1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-168-506-14 Sequence 7, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-240 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 2,	1552 99.2 665 15 US-10-168-506-14 Sequence 14, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247	1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-240 Sequence 24 1552 99.2 665 16 US-10-648-593-247 Sequence 24	1552 99.2 665 15 US-10-257-026-2 Sequence 24 1552 99.2 665 16 US-10-648-593-240 Sequence 24 1552 99.2 665 16 US-10-648-593-247 Sequence 24	1552 99.2 665 16 US-10-648-593-240 Sequence 240 1552 99.2 665 16 US-10-648-593-247 Sequence 24) 1552 99.2 665 16 US-10-648-593-247 Sequence 247,	
1552 99.2 665 9 US-09-816-494-2 1552 99.2 665 9 US-09-964-277-2 1552 99.2 665 15 US-10-377-072-26 1552 99.2 665 15 US-10-072-012-680 Sequence 1552 99.2 665 15 US-10-072-012-680 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-343-357-7 Sequence 1552 99.2 665 16 US-10-257-026-2 Sequence 1552 99.2 665 16 US-10-648-593-240 Sequence 1552 99.2 665 16 US-10-648-593-247 Sequence 1552 99.2 665 16 US-10-648-593-247 Sequence 1552 99.2 665 16 US-10-377-072-26 Sequence	1552 99.2 665 9 US-09-964-277-2 1552 99.2 665 15 US-10-377-072-26 Sequence 26 1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-188-506-14 Sequence 14, 1552 99.2 665 15 US-10-183-335-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24,	1552 99.2 665 15 US-10-377-072-26 Sequence 26. 1552 99.2 665 15 US-10-072-012-680 Sequence 68. 1552 99.2 665 15 US-10-168-506-14 Sequence 7. 1552 99.2 665 15 US-10-343-357-7 Sequence 7. 1552 99.2 665 15 US-10-257-026-2 Sequence 24. 1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-377-072-26 Sequence 26.	1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-168-506-14 Sequence 14 1552 99.2 665 15 US-10-343-357-7 Sequence 2, 1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 26,	1552 99.2 665 15 US-10-188-506-14 Sequence 14, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-48-593-247 Sequence 24, 1552 99.2 665 16 US-10-48-593-247 Sequence 24, 1552 99.2 665 16 US-10-48-593-247 Sequence 24, 1552 99.2 665 16 US-10-48-593-247 Sequence 24, 1552 99.2 665 16 US-10-48-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377	1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 26, 1552 99.2 665 16 US-10-377-072-26	1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-648-593-247 Sequence 26. 1552 99.2 665 16 US-10-377-072-26 Sequence 26.	1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-377-072-26 Sequence 27.) 1552 99.2 665 16 US-10-648-593-247 Sequence 247, . 1552 99.2 665 16 US-10-377-072-26 Sequence 26, <i>i</i>	. 1552 99.2 665 16 US-10-377-072-26 Sequence 26,
1552 99.2 665 9 US-09-816-494-2 1552 99.2 665 9 US-09-64-277-2 1552 99.2 665 15 US-10-377-072-26 1552 99.2 665 15 US-10-372-012-680 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-168-506-14 Sequence 1552 99.2 665 15 US-10-343-357-7 Sequence 1552 99.2 665 16 US-10-648-593-240 Sequence 1552 99.2 665 16 US-10-648-593-247 Sequence 1552 99.2 665 16 US-10-648-593-240 Sequence 1552 99.2 665 16 US-10-377-072-65 Sequence 1552 99.2 665 16 US-10-77-072-67 Sequence	1552 99.2 665 9 US-09-964-277-2 1552 99.2 665 15 US-10-377-072-26 Sequence 2, 1552 99.2 665 15 US-10-072-012-680 Sequence 14, 1552 99.2 665 15 US-10-168-506-14 Sequence 14, 1552 99.2 665 15 US-10-168-506-2 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 7, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-678-593-267 Sequence 24, 1552 99.2 665 16 US-10-377-072-67 Sequence 24, 1552 99.2 665 16 US-10-377-072-67 Sequence 26, 1552 99.2 665 16 US-10-072-012-679 Sequence 67.	1552 99.2 665 15 US-10-377-072-26 Sequence 26 1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-168-506-14 Sequence 14 1552 99.2 665 15 US-10-343-357-7 1552 99.2 665 15 US-10-257-026-2 1552 99.2 665 15 US-10-648-593-240 Sequence 24 1552 99.2 665 16 US-10-648-593-247 Sequence 27 1552 99.2 665 16 US-10-648-593-247 Sequence 24 1552 99.2 665 16 US-10-072-072-679 Sequence 24 1552 99.2 665 16 US-10-072-072-679 Sequence 26	1552 99.2 665 15 US-10-072-012-680 Sequence 68 1552 99.2 665 15 US-10-168-506-14 Sequence 14 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-240 Sequence 24 1552 99.2 665 16 US-10-648-593-247 Sequence 24 1552 99.2 665 16 US-10-377-072-26 Sequence 24 1552 99.2 665 16 US-10-377-072-679 Sequence 26	1552 99.2 665 15 US-10-168-506-14 Sequence 14, 1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 24, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 24, 1552 99.2 665 16 US-10-377-072-679 Sequence 24, 1552 99.2 665 16 US-10-072-012-679 Sequence 67, 1552 99.2 690 15 US-10-072-012-679 Se	1552 99.2 665 15 US-10-343-357-7 Sequence 7, 1552 99.2 665 15 US-10-257-026-2 Sequence 24, 1552 99.2 665 16 US-10-648-593-240 Sequence 24, 1552 99.2 665 16 US-10-648-593-247 Sequence 24, 1552 99.2 665 16 US-10-377-072-26 Sequence 26, 1552 99.2 665 16 US-10-377-072-26 Sequence 26, 1552 99.2 669 15 US-10-072-012-679 Sequence 26, 1552 99.2 690 15 US-10-072-012-679 Sequence 27, 1552 99.2 690 15 US-10-072-012-679 Se	1552 99.2 665 15 US-10-257-026-2 Sequence 2, 1552 99.2 665 16 US-10-648-593-247 Sequence 24. 1552 99.2 665 16 US-10-648-593-247 Sequence 26. 1552 99.2 665 16 US-10-377-072-26 Sequence 26. 1552 99.2 669 15 US-10-072-012-679 Sequence 67.	1552 99.2 665 16 US-10-648-593-240 Sequence 24 1552 99.2 665 16 US-10-648-593-247 Sequence 24 1552 99.2 665 16 US-10-377-072-26 Sequence 26 1552 99.2 669 15 US-10-072-012-679 Sequence 67	1552 99.2 665 16 US-10-648-593-247 Sequence 247, 1552 99.2 665 16 US-10-377-072-26 Sequence 26, 1 1552 99.2 690 15 US-10-072-012-679 Sequence 679,	. 1552 99.2 665 16 US-10-377-072-26 Sequence 26, 1552 99.2 690 15 US-10-072-012-679 Sequence 679,

45	44	43	42	41	40	39	38	37	36	35	34	ω W	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14
425	426	426	440.5	462.5	469	469	469	469	566	619	619	620	631.5	646	654.5	654.5	654.5	654.5	654.5	54.	807	837	985	988	1504.5	1514	1517	1544	1545	1545	1552
27.2	•	27.2	•	•	•	•	30.0	•	•	٠	•	•	40.4	41.3	41.8	41.8		•	41.8			53.5	63.0	63.2	96.2	96.8	97.0	98.7	98.8	98.8	99.2
394	394	394	419	381	482	482	482	444	140	155	155	501	461	517	170	170	170	170	170	169	155	616	663	625	680	677	660	672	665	665	690
ø	14	14	16	14	16	15	14	9	17	9	9	15	15	9	15	14	14	9	9	14	ø	15	5	15	15	15	15	15	15	15	15
US-09-736-457-805	US-10-059-585-46	US-10-060-065-25	US-10-472-380-2	US-10-184-832-2	US-10-648-593-164	US-10-058-270A-130	US-10-346-356-2	US-09-964-899-47	US-10-803-738-12	US-09-955-732-6	US-09-964-277-6	US-10-072-012-702	US-10-072-012-701	US-09-964-277-21	US-10-655-073-16	US-10-405-808-16	US-10-314-058-14	US-09-847-519A-11	US-09-775-925-26	US-10-346-356-15	US-09-964-277-7	US-10-072-012-266	-10-072-012	US-10-072-012-699	US-10-072-012-256	-10-072-012	US-10-072-012-682	US-10-296-115-1259	US-10-072-012-681	US-10-094-749-2312	US-10-425-114-54204
805,	46,			Sequence 2, Appli			e 2	47,	е !:	6, A	6, Apr	702,	e 70	21,	Sequence 16, Appl	16	e 14	11,	Sequence 26, Appl	е 11	.7	Š	700,	699,	æ	683,	e 682,	Sequence 1259, Ap	681,		Sequence 54204, A

ALIGNMENTS

```
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: BIZGES, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Sam
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-072-012-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 258, Applic Publication No. US20 GENERAL INFORMATION:
                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                       Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                               Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                     Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                 Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                   Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10072012 o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                  David W
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Meera
                                                                                                                              Same
```

```
Sequence 2, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU.
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; LENGTH: 662
; TYPE: PRT
; ORGANISM: Homo s
US-10-072-012-258
                                                                                                                                                                                                                                                                                                  RESULT 2
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                   á
                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                 SOFTWARE: FastSEQ for Windows Version SEQ ID NO 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
TYPE: PRT
ORGANISM: Homo
                                  LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PR FILING DATE: 2001-01-31

RAPPLICATION NUMBER: 60/265,395

PR FILING DATE: 2001-01-31

PR APPLICATION NUMBER: 60/266,406

PR FILING DATE: 2001-02-02

PR APPLICATION NUMBER: 60/266,767

PR APPLICATION NUMBER: 60/266,767

PR FILING DATE: 2001-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/265,517
FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                      옄:
                                                                                                                                                                                                                                                                                                                                                                                                                                        LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL 120
                                                                                                                                                                                                                                                                                                                                                                                                       302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            99.2%;
99.3%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 1552; DB 15;
Pred. No. 2.1e-143;
                                                                                                                                                                                        AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            .
•
                                                                                                                                                                                                                                                                                                                                                                                                                                        300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
```

```
; Sequence 2, Application US/09964277; Patent No. US20020137170A1
; GENERAL INFORMATION:
; APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
; TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY
; FILE REFERENCE: 200125, 434
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT FILING DATE: 2001-09-25
                       Ş
                                                           뮍
                                                                                         Ś
                                                                                                                           ₽
                                                                                                                                                      Ś
                                                                                                                                                                                           밁
                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                         ; TYPE: PRT ; ORGANISM: Homo sapiens US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT 3
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                   NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 2
LENGTH: 665
                                                                                                                                                                                                                                                                                                                       Query Match 99.3
Best Local Similarity 99.3
Matches 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
                              241
                                                              181
                                                                                              181
                                                                                                                             121
                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                             61
                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                          1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                   DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                            QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                 QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                             LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                           DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAGGEAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DKYLITELIQHSAKHKYDIDCSQKVVVYIDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAHEMIGTQI VTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative
                                                                                                                                                                                                                                                                                                                                       99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                       Score 1552; DB 9;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1552; DB
Pred. No. 2.2e-J
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9
                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 665;
                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ٥,
                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Gaps
300
                              300
                                                              240
                                                                                                                             180
                                                                                                                                                             180
                                                                                                                                                                                           120
                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                        0
```

```
Ś
                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT APPLICATION NUMBER: US 09/895,860
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR PILLING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILLING DATE: 2000-06-29
PRIOR PILLING DATE: 2000-11-28
PRIOR PILLING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2000-03-07
PRIOR PILLING DATE: 2000-04-25
PRIOR PILLING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/861,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILLING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILLING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILLING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILLING DATE: 2001-05-19
                             S
                                                                                밁
                                                                                                                                ঠ
                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application data removed -
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 26
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match 99.2%;
Best Local Similarity 99.3%;
                                                                                                                                                                                                                                                                                                                                                                                              Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 665
TYPE: PRT
ORGANISM: Homo Sapiens
:-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 26, Application US/10377072 Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180NNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Millennium Pharmaceuticals APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: US 09/815,419
181 QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                121
                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       301
                                                                                                                                                                                                                                                                                                                                                                                            300;
                                                                                                                                                                                      19
                                                                                                                                                                                                                           61 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASISSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                      1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                     LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                      DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                      MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -입
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Glucksmann, Maria A.
Meyers, Rachel E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Curtis, Rory A.J.
Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                              Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2001-03
                                                                                                                                                                                                                                                                                                                                                                                            1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DB 15;
Pred. No. 2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 665;
                                                                                                                                                                                                                                                                                                                                                                                            0
                                                                                                                                                                                                                                                                                                                                                                                            Gaps
                                                                                180
                                                                                                                                                                                      120
                                                                                                                                                                                                                                      120
                                                                                                                                                                                                                                                                                         60
```

```
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine B.
ITITLE OF INVENTION: Proteins and Nucleic Acids Encoding Sam
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILLING DATE: 2001-01-30
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILLING DATE: 2001-01-31
PRIOR FILLING DATE: 2001-01-31
PRIOR PRICH DATE: 2001-01-31
PRIOR FILLING DATE: 2001-01-31
PRIOR FILLING DATE: 2001-01-31
PRIOR FILLING DATE: 2001-01-31
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                       US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-072-012-680
                                                                                                                                                                                               PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 680, Application US/10072012 Publication No. US20040033493A1 GENERAL INFORMATION:
                                                                                                SEQ ID NO 680
LENGTH: 665
Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                       Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
                                                          ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPLICANT:
                                                                                                                                                                                                                                                                                                                                                               FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/266,406
FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: 60/266,767
                                                                             PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                        PatentIn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wolenc, Adam R.
Pena, Carol E. A
Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Muralidhara
David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Esha
99.2%;
Score 1552;
DB 15;
Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
```

```
APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CCURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 14
 밁
                         Ś
                                                                밁
                                                                                           Ś
                                                                                                                              맑
                                                                                                                                                           8
                                                                                                                                                                                             밁
                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                             US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 6
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity
                                                                                                                                                                                                                                                           Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 14, Application US/10168506 Publication No. US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 300; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: WHYTE, DAVID
                                                                                                                                                                                                                                                                                                                                      TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 665
                                 181
                                                                               121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
 181
                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    301 QT 302
                                                                                                                              13
                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61 DKYLITELIQHSAXHKYDIDCSQKYVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                           ۳
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILBAININCSKLMKRRLQQ
                                                                                                                                             DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                            MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                       QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                           DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                           MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ဌ
QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFI
                                                            LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DKVLITELIQHSAKHKVDIDCSQKVVVYXDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MANNING, GERARD
SUDARSANAM, SUCHA
                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RON
                                                                                                                                                                                                                                                                           99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         99.3%; Pred. No. 2.2e-143; ative 1; Mismatches 1;
                                                                                                                                                                                                                                                        Score 1552; DB 15;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1:
                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                        Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Indels
                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                        Gaps
                              240
                                                            180
                                                                                                                             120
                                                                                                                                                           120
                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                          0
```

```
; PRIOR APPLICATION NUMBER: US 60; PRIOR FILING DATE: 2000-09-08; NUMBER OF SEQ ID NOS: 20; SOFTWARE: PERL Program
SEQ ID NO 7; SEQ ID NO 7; LENGTH: 665
                               Ş
                                                                                         밁
                                                                                                                                        á
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: YAO, Monique G.; BUREORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAPALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: GRIFFIN, Jennifer A.; BAUCHN, Mariah R.
APPLICANT: WUE, Henry; WAREE, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
APPLICANT: KEARNEY, Liam
THTTE DE INTERNATION.
                                                                                                                                                                                                 В
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: NGUYEN, DATHEL B., CHAWLA, NAT:
APPLICANT: KEARNEY, Liam
FITTLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0173 PCT
CURRENT APPLICATION UNMBER: US/10/343,357
CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: PCT/US01/23716
PRIOR FILING DATE: 2001-07-26
PRIOR FILING DATE: 2000-07-28
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-09
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR FILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR FILING DATE: 2000-08-30
PRIOR FILING DATE: 2000-08-30
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR FILING DATE: 2000-08-30
PRIOR PRIOR PRIOR DATE: 2000-08-30
PRIOR PRIOR PRIOR DATE: 2000-08-30
PRIOR PRIOR PRIOR DATE: 2000-08-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 RESULT 7
US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 7, Application US/10343357 Publication No. US20040058341A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                             Matches 300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANIS: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CD1
                                                                                                                                             121
                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                            1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                         LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYPQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                    DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYBKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                             Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                    99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60/231,366
                                                                                                                                                                                                                                                                                                                                                                                                                        Score 1552; DB 15; Length Pred. No. 2.2e-143; Indels 1; Mismatches 1; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        0,
                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                     120
                                  240
                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
```

밁 S 밁

뭉 S

```
APPLICANT: Merck Patent GmbH
ITILE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDWS
CURRENT APPLICATION NUMBER: US/10/257,026
CURRENT FILING DATE: 2003-11-07
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
US-10-257-026-2
    US-10-648-593-240
US-10-648-593-240
IS-10-648-593-240, Application US/10648593

**Publication No. US20040106132A1

**Publication Invention: Equibb Company

**Publication Invention: IDENTIFICATION GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT TITLE OF INVENTION: PROTEIN TYROSINE KINASE FOR PROTEIN TYROSINE KINASES AND/OR

**PILE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS

**PILE REFERENCE: D0273 NP

**CURRENT APPLICATION NUMBER: US/10/648,593

**CURRENT APPLICATION NUMBER: 60/406,385

**PRIOR APPLICATION NUMBER: 60/406,385

**PRIOR PILING DATE: 2002-08-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 8
US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
Best Local Similarity
Matches 300; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 2, Application US/10257026 Publication No. US20040086859A1 GENERAL INFORMATION:
  NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                <u>약</u>
                                                                                                                                                                                                                                                                                                                                                                      QT 302
                                                                                                                                                                                                                                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                   LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQNGIGYYLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LAGGFABFSRCFPGLCEGKSTLVPTCISQPCLFVANIGFTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ន្ម
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                  302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 1552; DB 15;
Pred. No. 2.2e-143;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: PatentIn version 3.2
SEQ ID NO 247
LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
US-10-648-593-247
片
                          S
                                                                        밁
                                                                                                        S
                                                                                                                                                   밁
                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ; TYPE: PRT
; ORGANISM: Homo
US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-648-593-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 247, Application US/10648593
publication No. US20040106132A1
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: PatentIn version
SEQ ID NO 240
LENGTH: 665
                                                                                                                                                                                                                                                   Best
                                                                                                                                                                                                                               Matches
                                                                                                                                                                                                                                                                   Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 300;
                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301
121
                                  121
                                                                                                                                                                                                                               300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                        61
                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                     ...
                                                                                                                                                                                       ш
                                                                      OT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LVHCLAGISRSATIAIAYIMKRMDMSLDEAYREVKEKRPTISPNENFLGQLLDYEKKIKN 300
                    LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                       MAHEMIGTOIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                DKYLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MAHEMIGTQI VTERLVALLESGTEKVLLI DSRPFVEYNTSHI LEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                               99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.2%;
                                                                                                                                                                                                                           Score 1552; DB 16;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 1552; DB 16;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                 Length 665;
                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                             0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                               Сарв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                        120
```

240 240 180 120 120 60 60

Ś 밁 S 밁 ક 문 ঠ 밁 S 밁 S

밁

180

120 60 60

240 180

```
Ś
                                                              밁
                                                                                            Ś
                                                                                                                                                                                                                ; SOFTWARE: FastSEQ f
; SEQ ID NO 26
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo Sap
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR FILING DATE: 2000-11-28
PRIOR FILING DATE: 2000-11-28
                                                                                                                                                          Query Match
Best Local (
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 26, Application US/10377072 Publication No. US20040157221A9
                                                                                                                                          Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                              Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Millennium Pharmaceuticals Inc. APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                        Local
                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/815,419 FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: US 09/816,494 FILING DATE: 2001-03-23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2001-05-21
APPLICATION NUMBER: US 60/205,508
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICATION NUMBER: US 60/187,455 FILING DATE: 2000-03-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: US 09/861,801
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICATION NUMBER: US 60/199,801 FILING DATE: 2000-04-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                FILING DATE: 2001-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICATION NUMBER: US 09/843,297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                          300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  241
                          61
                                                                                                                                                          Similarity
DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                MÄHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ 60
                                                          MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVHCLAGISRSATIAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ဌ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ņ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              QQQGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPMLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Curtis, Rory A.J.
Logan, Thomas Joseph
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Meyers, Rachel E. Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          302
                                                                                                                                        Conservative
                                                                                                                                                                                                                                      Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Miyoung
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2000-05-19
                                                                                                                                                          99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Maria A.
                                                                                                                                    Score 1552; DB 16;
Pred. No. 2.2e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                  See File Wrapper or PALM
                                                                                                                                        Indels
                                                                                                                                                                        Length
                                                                                                                                      0
                        120
                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                    0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 12
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                        FILE REFERENCE: 21402-258

CURRENT APPLICATION NUMBER: US/10/072,012

CURRENT FILING DATE: 2002-01-31

PRIOR APPLICATION NUMBER: 60/265,102

PRIOR FILING DATE: 2001-01-30

PRIOR APPLICATION NUMBER: 60/265,514

PRIOR APPLICATION NUMBER: 60/265,517

PRIOR FILING DATE: 2001-01-31

PRIOR FILING DATE: 2001-01-31

PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 679, Application US/10072012
Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Tchernev, Velizar APPLICANT: Spytek, Kimberly APPLICANT: Zerhusen, Bryan
                                                                                            PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
  Remaining
NUMBER OF
                                      PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                        PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/266,406
                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TITLE OF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                              FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                T: Lepley, Denise M.
T: Rieger, Daniel K.
T: Burgess, Catherine E.
INVENTION: Proteins and Nucleic Acids Encoding
  Prior A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LAGGFAEFSRCFPGLCEGKSTLVFTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LÄGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gerlach, Valerie
Taupier Jr, Raymo
Gusev, Vladimir
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Faulgaru, Muralidhara
Anderson, David W.
Rastell:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Patturajan,
    Application NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Raymond
                      data removed
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  4
                    See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Same
```

```
ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids End
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR PILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-072-012-703
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           / TYPE: PRT
/ ORGANISM: Homo sapiens
US-10-072-012-679
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 703, Application US/10072012
Publication No. US20040033493A1
GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOPTWARE: PatentIn Ver.
SEQ ID NO 679
LENGTH: 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61 DKYLITELIQHSAKHKYDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    26 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                            Pena, Carol E. A
Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                 Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRFTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QQNGIGYYLNASYTCPKPDFIPBSHFLRVPVNDSFCEKILPWLDXSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               DKVLTTELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                           Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                        Rastelli, Luca
Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                       Padigaru, Muralidhara
Anderson, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                          Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patturajan, Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Score 1552; DI
; Pred. No. 2.3e-
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; DB 15;
2.3e-143;
                                                                                                                                            Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       265
```

```
GENERAL INFORMATION:

APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53313) B
CURRENT TITLING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 54204
LENGTH: 690
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/265,395
PRIOR PILLING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILLING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILLING DATE: 2001-02-07
PRIOR FILLING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILLING DATE: 2001-02-08
Remaining Prior Application data removed - 90
NUMBER OF SEQ ID NOS: 1391
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 703
LENGTH: 690
TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                                                                                  RESULT 14
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Best Loca
Matches
                                                                                                                                                                                                                                                                                                                        Sequence 54204, Application US/10425114
Publication No. US20040034888A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                  326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        86 DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLFVANIGPTRILFNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                  QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             QQNGIGYVLNASYTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        99.2%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 1552; DB 15;
Pred. No. 2.3e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ı
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       265
```

```
APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTOYUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NASUHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH cDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2312
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               RESULT 15
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ; FEATURE:
; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI.pep
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local S
Matches 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: ISOGAI,
APPLICANT: SUGIYAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 2312, Application US/10094749 Publication No. US20030219741A1
                                                                                                                                                                                                                                                              APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT:
           ORGANISM: Homo sapiens
                           LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   / Match 99.2%;
Local Similarity 99.3%;
les 300; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                146 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              86
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                          HIO, YURI
OTSUKA, KADRU
NAGAI, KEIICHI
IRIE, RYOTARO
TAMECHIKA, ICHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                   SUGIYAMA, TOMOYA
OTSUKI, TETSUJI
WAKAMATSU, AI
SATO, HIROYUKI
ISHII, SHIZUKO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI
                                                                                                                                                                                                                                                                                                                                                                                 YAMAMOTO, JULY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     QQNGIGYYLNASYTCPKPDFIPBSHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           QT 327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         QT 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   QQNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DKVLITELIQHSAKHKVDIDCSQKVVVYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                                                 ISONO, YURI
                                                                                                                                                                                                                                                                                                                                                                                                        SHIZUKO
TO, JUN-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAKAO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TOMOYASU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score 1552; DB 15;
Pred. No. 2.3e-143;
1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
```

```
Search completed: February Job time : 58.152 secs
                                                                                δ
                                                                                                            밁
                                                                                                                                  5
                                                                                                                                                                   뭐
                                                                                                                                                                                            á
                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Sim
Matches 299;
                                                       301
                                                                                 301
                                                                                                             241
                                                                                                                                                                   181
                                                                                                                                                                                               181
                                                                                                                                                                                                                           121
                                                                                                                               241 LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                                                                                                     121 LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRDVLNKELI 180
                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                        1 MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                                                                                                                                                                                                            Similarity
                                                                          QT 302
                                                                                                                                                                                     QQNGIGYVLNASYTCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCV
                                                                                                                                                                                                                                                                                                   DKYLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTYLLGKLEKSFNSVHL
                                                       ġr 302
                                                                                                            LVHCLAGISRSATIAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKN
                                                                                                                                                                 QNGIGYVLNASNTCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCV
                                                                                                                                                                                                                                                                                 DKVLITELIQHSAKHKVDIDCSQKVVVYYDQSSQDVASLSSDCFLTVLLGKLEKSFNSVHL
                                                                                                                                                                                                                                                                                                                                         MAHEMIGTQIVTERLVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQ
                                                                                                                                                                                                                           LAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTLILPNLYLGCQRDVLNKELM
                                                                                                                                                                                                                                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                         98.8%;
              9
              2005, 12:28:42
                                                                                                                                                                                                                                                                                                                                                                                              Score 1545; DB 1
Pred. No. 1e-142;
1; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                        DB 15;
                                                                                                                                                                                                                                                                                                                                                                                               2
                                                                                                                                                                                                                                                                                                                                                                                                                       Length
                                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                               <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                   120
                                                                                                                                         300
                                                                                                                                                                     240
                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                         60
```

```
Regult
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -MODEL-frame+ p2n.model -DEV=xlp
-Q=/cgn2 1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-Q=/cgn2 1/USPTO_spool_p/US10029345/runat_09022005_091208_25808/app_query.fasta_1.1294
-DB=168ued_patente_NA -QFMT=fastap -SUFFIX.p2n.rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bite -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi
-LIST=45 -DCCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15
-MODE-LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=200000000
-USER-US10029345_@CGCN 1 1_141 @runat 09022005_091208_25808 -NCPU=6 -ICPU=3
-NO MMAP -LARGEGÜERY -NEG SCORES=0 -WAIT -DSPBLOCKE=100 -LONGLOG
-DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           8
                                                                                                                                                                                                                                                                                                                                                                Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
    988
467.5
466.5
464.5
426
                                                                                                                                                                                                                                                                   Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           seq length: seq length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                                                                                                                                                                                                                                                                   Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                              Issued Patente NA:*

1: /cgn2-6/ptodatta/1/ina/5A_COMB.seq:*
2: /cgn2-6/ptodatta/1/ina/5B_COMB.seq:*
3: /cgn2-6/ptodata/1/ina/6A_COMB.seq:*
4: /cgn2-6/ptodata/1/ina/6B_COMB.seq:*
5: /cgn2-6/ptodata/1/ina/PCTUS_COMB.seq:*
6: /cgn2-6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1202784 segs, 818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          BLOSUM62
  99.
63.2
30.4
29.9
29.9
27.2
27.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MAHEMIGTQIVTERLVALLE......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      February 14, 2005, 09:42:14 ; Search time 133.355 Seconds
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Copyright
                                                                                                                                                                                                                                                                   Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000000000
1998
3544
2351
2377
333
1830
2109
2109
2109
2175
2475
13782
2240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                   DB
                US-09-816-494-3
US-09-816-494-1
US-09-949-016-3250
US-09-920-668-3
US-09-557-921-1
US-09-557-921-1
US-09-016-434-1135
US-09-03-655-946
US-09-949-016-14992
US-09-949-016-14992
US-09-016-434-1100
                                                                                                                                                                                                                                                                   ij
                                                                                                                                                                                                                                                                                                                              SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0.5
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              3705.573 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     without
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              .PNFNFLGQLLDYEKKIKNQT 302
            Sequence 3, Appli
Sequence 1, Appli
Sequence 3250, Ap
Sequence 3, Appli
Sequence 2877, Ap
Sequence 1, Appli
Sequence 1135, Ap
Sequence 946, App
Sequence 2615, Ap
Sequence 14992, A
Sequence 1100, Ap
                                                                                                                                                                                                                                                                   Description
```

4432	140	54331	24222222	13 15 15 15 15 15 15 15 15 15 15 15 15 15
357 357 357	408 380 380 380	425 425 425 415	44444444444444444444444444444444444444	425 425 425 425 425 425 425
222. 222. 8888		667777	1777777	22722
1619 1619 1619	2015 2283 2303 1987 279	2109 2363 1993 2000	2064 2064 2064 2109 2109 2109	1238 1238 1238 1238 1238 1238 1238 1238
* 4 4 4 4	44444	***	*****	04444444
2-703- 6-457- 4-1248 1-325- 9-184-	-09-949-016-49 -09-949-016-46 -09-922-146-3 -08-990-379- -09-016-434-91	-09-949-016-221 -09-949-016-221 -08-999-379-2 -09-016-434-129	-09-671-325-82 -09-6589-184-82 -09-6589-1824-82 -09-702-705-82 -09-736-457-82 -09-614-1248-82	0-290-11 2-705-80 6-457-80 4-1248-8 1-325-80 9-184-80 8-184-80 8-184-80 2-705-82 6-457-82
	equence 490 equence 3, equence 1, equence 91,	equence 820 equence 221 equence 2,21 equence 1,21 equence 1,21 equence 1,21	equence 82: equence 82: equence 82: equence 82: equence 82: equence 82: equence 82:	

ALIGNMENTS

```
US-10-029-345A-109_COPY_1_302 (1-302) x US-09-816-494-3 (1-1998)
                                                        Query Match:
                                                                          Percent Similarity:
Best Local Similarity:
                                                                                                                 Score:
                                                                                                                                       Pred. No.:
                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                              US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 1
US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 3, Application US/09816494
Patent No. 6664089
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR
FILE REFERENCE: 10448-030002
                                                                                                                                                                                                                                                                     SEQ ID NO 3
                                                                                                                                                                                                                                                                                  CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                 LENGTH: 1998
                                                                                                                                                                                                              sapiens
                                                        2.74e-200
1552.00
99.67%
99.34%
99.23%
                                         Gaps:
                                                                                                               Length:
Matches:
                                                          Mismatches:
Indels:
                                                                                                Conservative:
                                           004
```

유정

1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu

60

ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 60
SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40

```
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU
TITLE OF INVENTION: PHOSPHATASE MOLECULES AN
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
                                                                                                                                                         RESULT 2
US-09-816-494-1
                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                          유
                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                 Sequence 1, Application US/09816494 Patent No. 6664089
                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                    841
                                                                                                                                                                                                                                                                           281
                                                                                                                                                                                                                                                                                                                                                                                                           661
                                                                                                                                                                                                                                                                                                     781
                                                                                                                                                                                                                                                                                                                               261
                                                                                                                                                                                                                                                                                                                                                         721
                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                  221
                                                                                                                                                                                                                                                                                                                                                                                                                                                               601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   61
                                                                                                                                                                                                  CAGACT
                                                                                                                                                                                                                          GlnThr 302
                                                                                                                                                                                                                                                    ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                   IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                    LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                      CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                     LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                     ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CAGCAGAATGGGATTGGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                 906
                                                                             DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                   900
                                                                                                                                                                                                                                                                                                     840
                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                      780
                                                                                                                                                                                                                                                                                                                                                                                                                                  240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 354%
LENGTH: 354%
TYPE: DNA
ORGANISM: Homo Sc
FEATURE:
NAME/KEY: CDS
LOCATION: (589')
US-09-816-494-1
                        뭕
                                          Ş
                                                                          밁
                                                                                               Ş
                                                                                                                              日
                                                                                                                                                 Ş
                                                                                                                                                                                밁
                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                  멍
                                                                                                                                                                                                                                                                                                                                                                                            뫄
                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: FastSEQ for Windows Version SEQ ID NO 1
                           1309
                                                                             1249
                                                                                                                               1189
                                                                                                                                                                                  1129
                                                                                                                                                                                                                                     1069
                                                                                                                                                                                                                                                                                        1009
                                                                                                                                                        201
                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                              161
                                                                                                     221
                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                          949
                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                             688
                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                         ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                               GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                   ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                   CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                        ACTOTAGTOCOTACCTGCATTTCTCAGCCTTGCCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                               CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                 ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     (589)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (2583)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7.39e-200
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
```

1308

1248

180

140

948

80 828 100

888

60

648 40

768

밁 ð 멍 8

588 158

```
GENERAL INFORMATION:

GENERAL INFORMATION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OP INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED

TITLE OP INVENTION: WITH HUMAN DISEASE, METHODS OF DETECTION AND USES

FILE REFERENCE: CLOO1307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT APPLICATION NUMBER: 60/241,755

PRIOR FILING DATE: 2000-04-14

PRIOR FILING DATE: 2000-10-20

FRIOR APPLICATION NUMBER: 60/237,768

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-10-03

PRIOR FILING DATE: 2000-09-08

PRIOR FILING DATE: 2000-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109_COPY_1_302 (1-302) x US-09-949-016-3250 (1-2351)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 3
US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-949-016-3250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS: 207012
SOPTWARE: FastSEQ for Windows Version
SEQ ID NO 3250
LENGTH: 2351
TYPE: DNA
ORGANISM: Human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 3250, Application US/09949016 Patent No. 6812339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1369
   469
                                                                   409
                                                                                                    100
                                                                                                                                     349
                                                                                                                                                                                                     289
                                                                                                                                                                                                                                                                    229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    281
                                  120
                                                                                                                                                                                                                                                                                                                                      169
                                                                                                                                                                                                                                                                                                                                                                                                        109
                                                                                                                                                                    80
                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                     40
                                                                                                                                                                                                                                                                                                                                                                     20
                                                                GCAGACAGCTTCCTCTCCATCCTGCTGAGCAAGCTGGACGGCTGCTTCGACAGCGTGGCC
                                                                                                                                                 AspCysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer 99
                                                                                                                                                                                                                     GlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIle
                                                                                                                                                                                                                                                                                     SerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln
                                                                                                                                                                                                                                                                                                                                                     GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr
                                                                                                                                                                                                                                                                                                                                                                                                    ATGGCTGGGGACCGGCTCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                              MetAlaHisGluMetIleGlyThrGlnIleVal---ThrGluArgLeuValAlaLeuLeu
   ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAG
                      LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys
                                                                                                  SerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHis 119
                                                                                                                                   ACGGAGCCACAGGACGTGGTGGTCTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC
                                                                                                                                                                                                     CAGGGCAAGGTGACCATTGCGGAGCTCATCCAGCCGGCTGCACGCAGCCAGGTGGAGGCT
                                                                                                                                                                                                                                                                    TGGCATGTGCTCAGCTCCGAACATCTGCTGCTCCAAGCTGGTGAAGCGGCGGCTGCAG
                                                                                                                                                                                                                                                                                                                                      CGGGGCGGGCCTGGGCCGCTGGTCATCGACAGCCGCTCCTTCGTGGAGTACAACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACT 1494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.59e-123
989.00
81.40%
63.12%
63.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2351
190
55
54
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 USES
                                139
 528
                                                                 468
                                                                                                                                                                                                    348
                                                                                                                                                                                                                                     79
                                                                                                                                                                                                                                                                                                     59
                                                                                                                                                                                                                                                                                                                                      228
                                                                                                                                                                                                                                                                                                                                                                     39
                                                                                                                                                                                                                                                                                                                                                                                                      168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1428
                                                                                                                                                                                                                                                                    288
S
                                片
                                                              S
                                                                                             US-10-029-345A-109_COPY_1_302 (1-302) x US-09-920-668-3 (1-2377)
                                                                                                                                                   Query Match:
                                                                                                                                                               Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                  Score:
                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                      US-09-920-668-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 49
SEQ ID NO 3
LENGTH - ---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 3, Application US/09920668
Patent No. 6482644
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                LENGTH: 2377
TYPE: DNA
ORGANISM: Homo sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (135)...(
                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Lex M. Cowsert
APPLICANT: Brett P. Monia
TITLE OF INVENTION: ANTISENSE MODULATION OF DUAL SPECIFIC PHOSPHATASE 8 EXPRESSION
FILE REFERENCE: RTS-0246
                                                                                                                                                                                                                                                                                                                                                                                                                      CURRENT APPLICATION NUMBER: US/09/920,668
CURRENT FILING DATE: 2001-08-01
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    529
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   140
                                135 ATGGCTGGGGACCGGCTCCCGAGGAAGGTGATGGATGCCAAGAAGCTGGCCAGCCTGCTG 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 199
20 GluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThr 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MetAlaHisGluMetIleGlyThrGlnIleVal---ThrGluArgLeuValAlaLeuLeu 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACGACCAACTACTGTGAAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAG 1011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lув 299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCAGCCTG 1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCATGAAGACCATGGGCATGTCCTCCGACGACGCCTACAGGTTCGTGAAGGACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCGCTCTGCCACCATCGCCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCTGCCTGGCTGGACAAGTCCATCGAGTTCATCGATAAAGCCAAGCTCTCCAGCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys
                                                                                                                                                                                                                                                                                                                                    sapiens
                                                                                                                                                2.21e-123
988.00
81.40%
63.12%
63.17%
                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                  2377
190
55
54
2
```

298

278 888 258 828 238 768 218 708 198

948

밁 8 밁 ð 밁 S 맑 ð 밁 ঠ

ક

```
; Sequence 2877, Application US/09513999C
; Patent No. 6783961
; GENERAL INFORMATION:
APPLICANT: Dumas Milne Edwards, J.B.
APPLICANT: Discret, A.
APPLICANT: Giordano, J.Y.
; APPLICANT: Giordano, J.Y.
; TITLE OF INVENTION: Expressed Sequence Tags a
; Patent No. 6783961
; PATENT NO. 6783961
; PILE REFERENCE: 59.USZ.REG
; CURRENT APPLICATION NUMBER: US/09/513,999C
; CURRENT FILLING DATE: 2000-02-24
; PRIOR APPLICATION NUMBER: US 60/122,487
                                                                                                                                            RESULT 5
US-09-513-999C-2877
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                             Б
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                1035
                                                                                                                                                                                                     299
                                                                                                                                                                                                                            975
                                                                                                                                                                                                                                                  279
                                                                                                                                                                                                                                                                         915
                                                                                                                                                                                                                                                                                                                      855
                                                                                                                                                                                                                                                                                               259
                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                    795
                                                                                                                                                                                                                                                                                                                                                                                          219
                                                                                                                                                                                                                                                                                                                                                                                                                735
                                                                                                                                                                                                                                                                                                                                                                                                                                        199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        255 TGGCATGTGCTCAGCTCCGACATCTGCTGCTCCAAGCTGGTGAAGCGGCGGCTGCAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 40
                                                                                                                                                                                                                                                                     IleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArg
                                                                                                                                                                                                                                                                                                                                                               LeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys
                                                                                                                                                                               AAG 1037
                                                                                                                                                                                                     <u>Ļ</u>γs 299
                                                                                                                                                                                                                                         ProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle
                                                                                                                                                                                                                                                                                                                     CAAGTCATCGTCCACTGTCTGGCTGGCATCTCCCCGCTCTGCCACCATCGCCATCGCCTAC
                                                                                                                                                                                                                                                                                                                                 CysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyr
                                                                                                                                                                                                                                                                                                                                                                                                               GACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCCATCAACGACAACTACTGTGAAAAA
                                                                                                                                                                                                                                                                                                                                                                                                                            AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysPro
                                                                                                                                                                                                                           CCGTCCATCTCGCCCAACTTCAACTTCCTGGGCCAGCTGCTGGAGTACGAGCGCACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGCCCCAAGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ---SerThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACGGAGCCACAGGACGTGGTGTTATGACCAGAGCACGCGGGACGCCAGCGTGCTGGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ATCCTCACTGGGGGCTTCGCCACCTTCTCCTCCTGCTTCCCGGGCCTCTGCGAGGGCAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CGGGGCGGGCCTGGGCGGCTCGTCACAGCCGCTCCTTCGTGGAGTACAACAGC
                                                          Tags and
                                                           Encoded
                                                           Human
                                                           Proteins
                                                                                                                                                                                                                           1034
                                                                                                                                                                                                                                                 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   198
                                                                                                                                                                                                                                                                                              278
                                                                                                                                                                                                                                                                                                                    914
                                                                                                                                                                                                                                                                                                                                                                  854
                                                                                                                                                                                                                                                                                                                                                                                        238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         139
                                                                                                                                                                                                                                                                        974
                                                                                                                                                                                                                                                                                                                                           258
                                                                                                                                                                                                                                                                                                                                                                                                               794
                                                                                                                                                                                                                                                                                                                                                                                                                                      218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         674
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                             734
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
DB:
   밁
                   Ş
                                             뭐
                                                                δ
                                                                                           밁
                                                                                                              8
                                                                                                                                    맑
                                                                                                                                                             S
                                                                                                                                                                                     밁
                                                                                                                                                                                                       8
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                              US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                       Score:
                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                 ; NAME/KEY: UNSURE
; LOCATION: 37
; OTHER INFORMATION:
US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR FILING DATE: 1999-02-26
NUMBER OF SEQ ID NOS: 36681
SOFTWARE: Patent.pm
SEQ ID NO 2877
LENGTH: 333
TYPE: DNA
ORDANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FEATURE:

NAME/KEY: CDS
LOCATION: 127..333
FEATURE:
NAME/KEY: misc feature
LOCATION: 17
OTHER INFORMATION: h=a o
                                                                                                                                                                                                                                                                                                                                                                                                                                              NAME/KEY: misc_feature
LOCATION: 237
OTHER INFORMATION: w=a
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LOCATION: 58
OTHER INFORMATION: r=a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LOCATION: 19
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NAME/KEY: misc_feature
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OTHER INFORMATION: n=a,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME/KEY: misc_feature
LOCATION: 36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FEATURE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LOCATION: 18
OTHER INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FEATURE
                       111
   299
                                               239
                                                                                                                                          119
                                                                                            179
                                                                     91
                                                                                                                   71
                                                                                                                                                                51
                                                                                                                                                                                       59
                                                                                                                                                                                                             31
                                                                                                                                                                                                                                                            12
                                                                                                                                                                                                                                   Н
euGluLysSerPheAsnSerValHisLeuLeuAla
                                                                                                                                                                                                                                  erSerGlnAspValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysL
                                                                                                        isSerAlaLysHisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnS
                                                                                                                                                     erLysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnH
                                                                                                                                                                                      CCGGCCATTTGTGGAATACCAATACATCCCACATTTTGGAAGCCATTAATATCAACTGCT
                                                                                                                                                                                                     rArgProPheValGluTyr-AsnThrSerHisIleLeuGluAlaIleAsnIleAsnCysS
                                              GCTCCCAAGATGTTGCCTCTCTCTCTCAGACTGTTTTCTCACTGTACTTCTGGGTAAAC
                                                                                            ATTCAGCGAAACATAAGGTTGACATTGATTGCAGTCAGAAGGTTGTAGTTTACGATCAWA
                                                                                                                                         CCAAGCTTATGAAGCGAAGGTTGCAACAGGACAAAGTGTTAATTACAGAGCTCATCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  k=g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                y=c
                                                                                                                                                                                                                                                                                                                                                                                                              Xaa=His
                                                                                                                                                                                                                                                                                                                5e-55
475.00
93.81%
93.81%
30.37%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ဝ္ဂ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                မ္ပ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ú
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ω
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             a
                                                                                                                                                                                                                                                                                                                                                                                                              ဝူ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ი
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ğ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      õ
                                                                                                                                                                                                                                                                                                                                                                                                              Gln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ct
                                                                                                                                                                                                                                                                               x US-09-513-999C-2877
                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                      106
5
3
                                                                                                                                                                                                                                                                                (1-333)
                                              298
                                                                    111
                                                                                           238
                                                                                                                  91
                                                                                                                                         178
                                                                                                                                                                71
                                                                                                                                                                                      118
                                                                                                                                                                                                            51
                                                                                                                                                                                                                                   58
```

밁 S δ

S

RESULT 6 US-09-557-921-1

```
Best Local Similarity:
Query Match:
DB:
                                                                                                                           밁
                                                                                                                                                Ş
                                                                                                                                                                                       밁
                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                 용
                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                         გ
                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109_COPY_1_302 (1-302)
                      ş
                                                             밁
                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-557-921-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SOPTWARE: FastSEQ for Windows Version SEQ ID NO 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sequence 1, Application US/09557921 Patent No. 6551810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LENGTH: 1830
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PILE REFERENCE: 200125.416
CURRENT APPLICATION NUMBER: US/09/557,921
CURRENT FILING DATE: 2000-04-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS:
   1191
                                                                                                                             1077
                                                                                                                                                                                         1020
                                                                                              188
                                                                                                                                                        168
                                                                                                                                                                                                                                                                                                                                                                             843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 603 GTCATCATTGACTGCAGGCCCTTCATGGAGTACAACAAGAGTCACATCCAAGGAGCTGTC
                              203
                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                 903
                                                                                                                                                                                                                                                                                                                                                125
                                                                                                                                                                                                                                                                                                                                                                                                              105
                                                                                                                                                                                                                                                                                                                                                                                                                                            783
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         723 CTAGACTTGATTTCCTGTAGGGAAGGCAAGGACTCTTTCAAGAGGATCTTTTCCAAAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          85
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   47
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              27 LeuLeuIleAspSerArgProPheValGluTyrAsnThrSerHisIleLeuGluAlaIle
                                                                                                                                                                                                                                                                                                                                                                           CACATAGTCCTCGAGTCCCTGAAGAGAGAAGGCAAAGAACCTCTGGTGTTGAAAGGTGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CACATTAACTGTGCCGATAAGATCAGCCGGCGGAGACTGCAGCAGGGCAAGATCACTGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnIleAsnCysSer---LysLeuMetLysArgArgLeuGlnGlnAspLysValLeuIle
-----AACTACAAGCGGCTGCCAGCCACTGACAGCAACAAGCAGAACCTGCGGCAGTAC 1244
                             GluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeuProTrp
                                                                                              ValLeuAsnAlaSer----
                                                                                                                           CTTGGCAATGAGCAGGATGCTCAGGACCTGGACACCATGCAGCGGCTGAACATCGGCTAC
                                                                                                                                                        LeuGlyCysGlnArgAspValLeuAsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyr 187
                                                                                                                                                                                                                   GlnProCysLeuPro---ValAlaAsnIleGlyProThrArgIleLeuProAsnLeuTyr 167
                                                                                                                                                                                                                                                     TGCCGGGAGGTGGGGGGCGCATCCGCGCCTCGAGCTTGCTACCTCAGCCCATC---
                                                                                                                                                                                                                                                                                                                 PheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLys------
                                                                                                                                                                                                                                                                                                                                                                                                          ThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeuLeuAlaGlyGly
                                                                                                                                                                                                                                                                                                                                                                                                                                           ATTATAGTTTATGATGAGAATACCAATGAACCAAGCCGAGTGATGCCCTCCCAGCCACTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSerAspCysPheLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ThrGluLeuIleGln---HisSerAlaLysHisLysValAspIleAspCysSerGlnLys
                                                               GTCATCAACGTCACCACTCATCTTCCCCCTCTACCACTATGAGAAAGGCCTGTTC-----
                                                                                                                                                                                       CCCACCACCCCTGACATCGAGAACGCTGAGCTCACCCCCATCTTGCCCTTTCCTGTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          469.00
57.72%
35.91%
29.99%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DSP-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          6.29e-53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DUAL-SPECIFICITY PHOSPHATASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             x US-09-557-921-1 (1-1830)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
Indels:
                                                                                            TyrThrCysProLysProAspPheIlePro
                                                                                                                                                                                                                                                                                SerThrLeuValProThrCysIleSer 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1830
107
65
96
30
                              222
                                                                                              202
                                                                                                                                                                                       1076
                                                                                                                                                                                                                                                     1019
                                                                                                                                                                                                                                                                                                                                                                             902
                                                                                                                                                                                                                                                                                                                                                                                                            124
                                                                                                                           1136
                                                                                                                                                                                                                                                                                                                 962
                                                                                                                                                                                                                                                                                                                                                139
                                                                                                                                                                                                                                                                                                                                                                                                                                           842
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         782
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      84
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     722
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   65
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  662
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              46
```

```
Query Match:
DB:
                             Percent Similarity:
Best Local Similarity:
                                                          Score:
                                                                           Pred. No.:
                                                                                      Alignment Scores:
                                                                                                                     US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                RESULT 7
US-09-016-434-1135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Patent No. 650093
                                                                                                                                                                                                                                     TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GENERAL INFORMATION:
APPLICANT: Janice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION:
TITLE OF INVENTION: PATHWAY GENE
NUMBER OF SEQUENCES: 1490
                                                                                                                                                                                                                                                                                                                            CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                IMMEDIATE SOURCE:
LIBRARY: GENBAN
CLONE: 91418933
                                                                                                                                                                                                                                                                                REFERENCE/DOCKET NUMBER: PA
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                       CLASSIFICATION:
PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CORRESPONDENCE ADDRESS:
                                                                                                                                                                                TOPOLOGY:
                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                           TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                          FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CITY: PALO ALTO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ADDRESSEE:
                                                                                                                                                                                                                          LENGTH:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1305
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1245
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1425
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1135,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysValLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACTCGGATGACCATGACTGATGCTTATAAATTTGTCAAAGGCAAACGACCAATTATCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTTGAAGAGGCTTTTGAGTTCATTGAGGAAGCTCACCAGTGTGGGAAGGGGCTTCTCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACTGCCAGGCTGGGGTGTCCCGCTCCGCCATCGTCATCGCTTACTTGATGAAGCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CALIFORNIA
                                                                                                                                                                                                                        2109 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  B: INCYTE PHARMACEUTICALS, INC. 3174 PORTER DRIVE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Application US/09016434
0938
                                                                                                                                                   GENBANK
                                                                                                                                                                               linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                     HEREWITH
                                                                                                                                                                                           single
 1.29e-52
467.50
53.56%
34.06%
29.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US/09/016,434
                                                                                                                                                                                                                                                                                                                             37,071
                                                                                                                                                                                                                                                                                                                 PA-0002
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FOR THE DETECTION OF SIGNALING EXPRESSION
Mismatches:
Indels:
Gaps:
                                         Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                 SD
 2109
110
63
105
45
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           242
```

```
; Sequence
                    RESULT 8
US-09-023-655-946
                                                                                                                                                                                                                                               Ś
                                                                                                        Ş
                                                                                                                                               밁
                                                                                                                                                                               δ
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-09-016-434-1135 (1-2109)
                                                                                                                                                                                                                                                                                          1204
                                                                                                                                            1324 ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG
                                                                            1384 AGGACGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1024
                                                                                                              296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197
     946,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      730
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          670 GAGAATACGGGCGGCGAGTCGTTGCTCGGGGCTGCTGCTCAAGAAGCTCAAGGACGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              490 TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         96 AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 59 GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                                                  GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                                                                                                                                                           IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
                                                                                                                                                                                                                                                                                                                                                                                                                                  AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG 1143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTGGACGTGTTGGAGGAATTCGGCATCAAGTACATCTTGAACGTCACCCCCAATTTGCCG
                                                                                                          LysLysIle 298
                                                                                                                                                                                                                    GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                          AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                              SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                             CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCCTTCCCAGTGGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGGGCTCGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val 95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ACCCGGCGCTGTGGCACCGCGACACGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGGGGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
     Application
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
   US/09023655
                                                                                                                                             1383
                                                                                                                                                                                                                   1323
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            196
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    789
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           549
                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Patent No. 6607879
; GENERAL INFORMATION:
APPLICANT: Cocks, Benjamin G.
APPLICANT: Susan G. Stuart
APPLICANT: Susan G. Stuart
TITLE OF INVENTION: COMPOSITION FOR THE DET
TITLE OF INVENTION: EXPRESSION
NUMBER OF SEQUENCES: 1508
CORRESPONDENCE ADDRESS:
ADDRESSES: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
S
                                   밁
                                                                 Ś
                                                                                                        밁
                                                                                                                                        Ś
                                                                                                                                                                               밁
                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109_COPY_1_302 (1-302) x US-09-023-655-946 (1-2109)
                                                                                                                                                                                                                                                                                                                                                                                                                                                   Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-09-023-655-946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TELEFAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 9
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
ATTORIX/AGENT INFORMATION:
ANAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-C
TELECOMMUNICATION INFORMATION:
TELEPHONE: (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TOPOLOGY: lines
IMMEDIATE SOURCE:
LIBRARY: GENBAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/023,655
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: HEREWIT CLASSIFICATION: PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             COMPUTER READABLE FORM: MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CLONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COUNTRY: U
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    STATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LENGTH: 2109 base pairs
                                 610 ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCAGCGACTGGAAC
                                                                                                            550
                                                                                                                                                                               490
                                                                                                                                                                                                                                                      430
                                                                                                                                                                                                             39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                                                                                                                                                         19 LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                        CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  nucl
                                                                                                                                          GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal 77
                                                                                                                                                                                                                                                    AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                   AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                             TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          g1418933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      leic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             single
                                                                                                                                                                                                                                                                                                                                                                          1.29e-52
467.50
53.56%
34.06%
29.89%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PA-0001
                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FOR THE DETECTION OF BLOOD CELL GENE
                                                                                                                                                                                                                                                                                                                                                                                             Conservative: Mismatches:
                                                                                                                                                                                                                                                                                                                                                                            Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ន
```

```
Sequence 2615, Application US/09949016

Patent No. 6812339

GENERAL INFORMATION.

APPLICANT: VENTER, J. Craig et al.

TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASS

TITLE OF INVENTION: WITH HUMAN DISEASE, METHODS OF

PILE REFERENCE: CL001307

CURRENT APPLICATION NUMBER: US/09/949,016

CURRENT FILING DATE: 2000-04-14

PRIOR APPLICATION NUMBER: 60/241,755

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/237,768

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 60/231,498

PRIOR APPLICATION NUMBER: 2000-09-08

NUMBER OF SEQ ID NOS: 207012

SOPTWARE: PastSEQ for Windows Version 4.0

SEQ ID NO 2615

TYDEY DATE: 2475
                                                                                                                                                                                                                                                                                                                 US-09-949-016-2615; A
                                                                                                                                                                                                                                                                                                                                                  RESULT 9
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             र्ठ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                   1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                     1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1144
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TIGACGIGIIGGAGGAATICGGCAICAAGIACAICIIGAACGICACCCCCAATIIGCCG
                                                                                                                                                                                                                                                                                                                                                                                   AGGACGCTG 1392
                                                                                                                                                                                                                                                                                                                                                                                                                  LysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATGAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GluLygArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCCTTCCCAGTGGAGATCTTGCCCCTTCCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT 1263
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----ProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGGGGCTCGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GAGAATACGGGCGGGTCGTTGCTCGGGCTGCTCAAGAAGCTCAAGGACGAGGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TGCGAG-----ACCAATCTAGACGGCTCGTGTAGCAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                             ASSOCIATED OF DETECTION AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843
                                           Ś
                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                             밁
                                                                                                              Ś
                                                                                                                                               밁
                                                                                                                                                                         S
                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; ORGANISM: Human
US-09-949-016-2615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                  1053
                             256 IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys 275
                                                                                                                                                                                                                                                                                                                                                                                 159
                                                                                                                                                                                                                                                                                                                                                                                                                  993
                                                                                                                                                                                                                                                                                                                                                                                                                                                   158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       699
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCGTCGCACATCGAGTCGGCCATCAACGTGGCCATCCCGGGCATCATGCTGCGGCGCCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
               GTGGCTTACCTTATGCAGAAGCTCAATCTGTCGATGAACGATGCCTATGACATTGTCAAA
                                                                                                SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla 255
                                                                                                                                                                                                                                                                               TIGGACGIGIIGGAGGAAIICGGCATCAAGIACAICTIGAACGICACCCCCAAIITGCCG
                                                                                                                                                                                                                                                                                                    LysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AlaAsnIleGly-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACCCGGCGCTGTGGCACCGACACAGTGGTGCTCTACGACGAGCAGCAGCAGCGACTGGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAla---LysHisLysVal
                                                                                                                                               CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                             AATCTCTTTGAGAACGCAGGAGAGTTTAAATACAAGCAAATCCCCATCTCGGATCACTGG
                                                                                                                                                                                                                                                                                                                                                 TCCTTCCCAGTGGAGATCTTGCCCTTCCTCTACTTGGGCTGTGCCAAAGACTCCACCAAC
                                                                                                                                                                                                                                                                                                                                                                                -----proThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsn 176
                                                                                                                                                                                                                                                                                                                                                                                                                 CTGGGGCTCGGGGCCTGCGGATCAGCTCTGACTCTTCCTCGGACATCGAGTCTGACCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysGluGlyLysSerThrLeuValProThrCys---IleSerGlnProCysLeuProVal 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeu 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GAGAATACGGGCGGCGAGTCGGTGCTCGGGCTGCTCAAGAAGCTCAAGGACGACGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AspIleAspCys---SerGlnLysValValValTyrAspGlnSerSerGlnAsp---Val
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CAGAAGGGTAACCTGCCGGTGCGCGCGCGCTCTTCACGCGCGGCGAGGACCGGGACCGCTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                 AAGAACTGTGGTGTCTTGGTACATTGCTTGGCTGGCATTAGCCGCTCAGTCACTGTGACT
                                                                                                                                                                                                                                            LysPro---AspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCGGGCGTTCTACCTGGAAGGTGGCTTCAGTAAGTTCCAAGCCGAGTTCTCCCTGCAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ----ACCAATCTAGACGGCTCGTGTAGCAGCAGCTCGCCGCCGTTGCCAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.33e-52
466.50
53.56%
34.06%
29.83%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         x US-09-949-016-2615 (1-2475)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2475
110
63
105
45
                                                                                 1352
                                                                                                                                                                                                                 1232
                                                                                                                                                                                                                                                215
                                                                                                                                                                                                                                                                                 1172
                                                                                                                                                                                                                                                                                                                                                  1112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           578
                                                                                                                                                                                                                                                                                                                 196
                                                                                                                                                                                                                                                                                                                                                                                                                                                   158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         698
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          88
```

Qy 178 178	Db 9238 GCAGGGCTTGCGGGAGGGCCCCGGCAGGGCTCGGGGAGCGGGGAGCTGGCCAA 9297	Qy 178 178	Db 9178 GCATGGGTGGGGGCCCAGGAGGACCCCAGGCTCCCCACCCA	Qy 178 178	Db 9118 GGAGCGGGGATGAGGGAAGGAAGGGAGCTGAAGGCAGTGGATGAGCTTGGGTGTGGGAGAA 9177	Qy 178 178	Db 9058 GTGGAGTTCGGGGGGTGGTCAATGGGAAAGGGGCAGGAGCTCCAGAAGCAGCTTGGCAGC 9117		Qy 162 IleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGlu 178	Db 8939 CTGCTACCCATGAGCCTCTCCCAGCCCTGCCTGTGCCCAGCGTGGGCCTGACCCGC 8998	8879 GGGGGCTTCGCCACCTTCTCCTGCTTCCCCGGCCTCTGCGAGGGCAAGCCTGCTGCC	123 GlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSerThr	US-10-029-345A-109_COPY_1_302 (1-302) x US-09-949-016-14992 (1-13782)	Match: 29.70% Indels: 4 Gaps:	Percent Similarity: 29.69\$ Conservative: 25 Best Local Similarity: 24.90\$ Mismatches: 22	No.: 8.56e-51 Length:		14992 13782 A	; PRIOR FILING DATE: 2000-09-08 ; NUMBER OF SEQ ID NOS: 207012 ; SOPTWARE: FastSEO for Windows Version A O	APPLICATION NUMBER: 60/231,	FILING DATE: 2000-10-20 APPLICATION NUMBER: 60/237,	CURRENT FILING DATE: 2000-04-14 DRICH ADDITCHTON NUMBER - 60/241 755	TIS/08/949 016	TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED	DIN C	; Sequence 14992, Application US/09949016 ; Patent No. 6819319	RESULT 10	Db 1473 AGGACGCTG 1481	Qy 296 LysLysIle 298	Db 1413 ATGAAAAAATCCAACATATCCCCTAACTTCAACTTCATGGGTCAGCTGCTGGACTTCGAG 1472	gProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
Db 10	-		-		н		ц	Qy	Db 11	_	Qy	B 2			ДЬ	VΩ	Db Qy	Db &		ν	Db	δ	Db	Qy	DЬ	9	Db	Qy	סס	φ	Db
2 0 A19F10.HILLESSELF.GASHFHEASHFHEASHFHEUGLYSTHLEHEGUASDIYEGUAYSHYS 23/ :::	1/ CCTGGCCCGGCGGCGCCTGGGGCTCCTCCCCCCCGCAGGTTCGTGAAAGAACAGG	// A Composition of the composit	5/ CITAGACCAGCCTGGCGCACATGAGCTCGTGGGTGCCCCAGCGGGTGCGTCAGGTGGGCAG	71 271	97 GGCTGCCCACTTGCACCAGAATGACCCCACCGTCCAGGACCCGTGGCAAGGGAGGAGGA	71	37 TACAGGTACCACCTTCCCCAGTCGCGCACTTGTGGCTCACAGCGTCGCTTCCCCTTCCCCC	271 Tyr 271	231 SELALATITITISA ETTENLATYFILEMECLYBATYMECASPMECSETICHASPATIA 270	17 GATANAGCCANGCTCTCCAGCTGCCAAGTCATCGTCCACTGTCTGGCTGGC	232LysalaLysalaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArg 250	9957 GGGCCAGGGAGAAGCTGTGCAGTCTTAGCCCTCACCTGGCCCCCATGGCCCACCTGCCCA 10016	989/ GARGGGGTCCCCAGGAAGIAGCCGGAAACIGITGGGCAGTTGGGCGGGTGGGGGTCCCCTACCT 9956	31 231	9837 GGGCGGAGGGCAGGGACCTGGCTAGAGGAAGGCTAGAGCTGTGTGTG	231 231	216 CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGlu 231 :::	9718 CCCAAGCCTGACTTCATCTGCGAGAGCCGCTTCATGCGGGTCCCCATCAACGACAACTAC 9777	58 CTCCAGGATCTGATGACGCAAAATGGAATAAGCTACGTCCTCAACGCCAGCAACTCCTGC	LeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCys	9598 CCTCCACCTTCACTCCCGCCCCGAGCTTCTCCCCACCCCTTTCCCAACCCGGCCCTCCCGCCC 9657	178 178	9538 GGGACAAATTCCAAGGCTCCCAGGATTCTAAAGGCCCTCCTGACGGCAGGGCAGGAAAAG 9597	178 178	9478 CAGGGTGCCAGGGTGGACCAGAGAGGCCTCCTGGGCCCTCCCCTGGATACACTGGGATCT 9537	178 178	9418 ACCAGCCGTGGGGGGCCTGCAGTCGGAGGCCAGCCGTGCCCCCCCC	178 178	9358 GACGAGGGAAAAGGGTAAAAGCCACCCAGCCAGGCAATCATAAAATTCCTAGGAGCCCACC 9417	178 178	9298 GCTGCGGATGTCACTGGGCCTCTGGCCAGCTCTGAAAGAATCCCCATGTTTTAAAAATGGT 9357

```
CLONE: GENBANK
US-09-016-434-1100
                                                        밁
                                                                                        ঠ
                                                                                                                           밁
                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 11
US-09-016-434-1100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                  S
                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-09-016-434-1100 (1-2240)
                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                           Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 1100, App
Patent No. 6500938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: Jenice Au-Young
APPLICANT: Jeffrey J. Seilhamer
TITLE OF INVENTION: COMPOSITION FOR THE DETECTION OF SIGNALING
TITLE OF INVENTION: PATHWAY GENE EXPRESSION
NUMBER OF SEQUENCES: 1490
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TELEPAX: (650) 845-4166
INFORMATION FOR SEQ ID NO: 1
SEQUENCE CHARACTERISTICS:
LENGTH: 2240 base pairs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CLASSIFICATION:
ATTORNEY AGENT INFORMATION:
NAME: Zeller, Karen J.
REGISTRATION NUMBER: 37,071
REFERENCE/DOCKET NUMBER: PA-0
TELECOMMUNICATION INFORMATION:
TELECOMMUNICATION BEEGINESS
                                                                                                                                                                                                                                                                                                                           No.:
                                                                                                                                                                                                                                                                                                                                                                                                               IMMEDIATE SOURCE:
LIBRARY: GENBA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION DATA:
APPLICATION NUMBER:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                       Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Word Perfect 6.1 for Windows/MS-DOS 6.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                          TOPOLOGY: 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICATION NUMBER: FILING DATE: HEREW:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ADDRESSEE: INCYTE PHARMACEUTICALS, INC.
STREET: 3174 PORTER DRIVE
CITY: PALO ALTO
STATE: CALIFORNIA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TELEPHONE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10437 CTGAAG 10442
                                                        291
                                                                                                                             234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   298
                    59
                                                                                          39
                                                                                                                                                               19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    94304
                                                                                                                           CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
GlnGlnAspLysValLeuIleThrGluLeuIle-----
                                                        GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                               LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleLys
                                                                                        ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                     linear
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/09016434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  (650) 855-0555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HEREWITH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   299
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         single
                                                                                                                                                                                                                                      6.38e-47
426.00
54.85%
33.44%
27.24%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US/09/016,434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PA-0002 US
                                                                                                                                                                                                                                                 Matches:
Conservative:
Mismatches:
Indels:
                ·GlnHisSerAlaLysHisLys
                                                      347
                                                                                                                             290
                                                                                                                                                               38
; TYPE: DNA
; ORGANISM: Mus
US-09-371-671B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                å
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                   US-09-371-671B-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                         Sequence 10, Application US/09371671B Patent No. 6548743
GENERAL INFORMATION:
                                                                       SOFTWARE: FastSEQ for Windows Version SEQ ID NO 10
                                                                                                                                                                                                                               APPLICANT: Sheen, Jen
APPLICANT: Chiu, Wan-Ling
TITLE OF INVENTION: TRANSGENIC PLANTS
TITLE OF INVENTION: DUAL-SPECIFICITY
FILE REFERENCE: 00786/370002
                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/371,671B
CURRENT FILING DATE: 1999-08-10
PRIOR APPLICATION NUMBER: 60/155,934
PRIOR FILING DATE: 1999-01-14
                                                                                                          NUMBER OF SEQ ID NOS:
                                                                                                                           PRIOR APPLICATION NUMBER: 60/095,938 PRIOR FILING DATE: 1998-08-10
                                                        ENGTH: 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1005
                                                                                                                                                                                                                                                                                                                                                                                                                                       1065 ATCATCTCGCCCAACTTCAGCTTCATGGGACAGCTGCTGCAGTTCGAGTCCCAGGTG 1121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    945
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           885
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 825
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          588
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 528
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         468
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     348
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        180 IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            135 LeuCysGluGlyLysSerThrLeu---------ValProThrCysIleSer 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GIGCIGGIGCACIGCCAGGCGGCATCICGCGGTCGGCCACCATCIGCCTGGCCTACCIG 1004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC 944
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ThrargIleLeuProasnLeuTyrLeuGlyCysGlnArgaspValLeuAsnLysGluLeu 179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GlnPro---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 587
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla 96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC 1064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro 279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC----CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGATCCTTCCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GAGCCCTTGGACCTGGGCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGGGGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCTGTTCTAAAACCAAGGCCCTGGCAGCCCATCCCCACCCCGGTTCCCCCCAGCGCCACA 647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTCCGCGAGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG 527
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe--- 115
                    musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXPRESSING A MAPK PHOSPHATASE AND USES THEREOF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 884
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       407
```

```
S
                                  밁
                                                         δ
                                                                                            밁
                                                                                                                      δ
                                                                                                                                                           밁
                                                                                                                                                                                  S
                                                                                                                                                                                                                      В
                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109_COPY_1_302 (1-302) x US-09-371-671B-10 (1-944)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
                                                              276
                                                                                              810
                                                                                                                                                            750
                                                                                                                                                                                        236
                                                                                                                                                                                                                          690
                                                                                                                                                                                                                                                      216
                                                                                                                                                                                                                                                                                     633
                                                                                                                                                                                                                                                                                                                    196
                                                                                                                                                                                                                                                                                                                                                    573
                                                                                                                                                                                                                                                                                                                                                                                 176
                                                                                                                                                                                                                                                                                                                                                                                                                 513
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              453
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             399
                                                                                                                                                                                                                                                                                                                                                                                                                                               158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             151
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 113 LysSerPheAsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 219 GGCCGCCTGCTGGCCGAGCCTACCACGCCGTGGTGCTGCTGGACGAGCGCAGCGCCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     95
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ភ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15 LeuValAlaLeuLeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         35 ValGluTyrAsnThrSerHistleLeuGluAlaIleAsnIleAsnCysSerLysLeuMet 54
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          39 CTGCGCGCGCTGCTGCGAGAGGGCGCCGCGCAGTGCCTGTTGTTGGATTGTCGCTCCTTC
                             CAGAGGCGGAGTATCATCTCCCCGAACTTCAGCTTCATGGGCCAGCTGCAGTTTGAG
LysLysIle 298
                                                        GluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGlu 295
                                                                                                                        IleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLys
                                                                                                                                                                                  SerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAla
                                                                                                                                                                                                                                                                                                                                               GGAAGGATATGCTTGAGCCTTGGGCATCACCGCCTTGATCAACGTCTCAGCCAATTGT
                                                                                            CTTGCTTACCTCATGAGGACTAACCGGGTAAAGCTGGACGAGGCCTTTGAGTTTGTGAAG
                                                                                                                                                         GCTGGAGGGAGAGTGTTTGTTCATTGCCAGGCCGGCATCTCCCGGTCAGCCACCATCTGC
                                                                                                                                                                                                                     AAGGCAGACATCAGCTCCTGGTTCAACGAGGCTATTGACTTCATAGACTCCATCAAGGAT
                                                                                                                                                                                                                                                  CysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAla
                                                                                                                                                                                                                                                                                     CCTAAC----CACTTTGAGGGTCACTACCAGTACAAGAGCATCCCTGTGGAGGACAACCAC
                                                                                                                                                                                                                                                                                                               ProLysProAspPheIleProGluSerHisPheLeuArgValProValAsnAspSerPhe
                                                                                                                                                                                                                                                                                                                                                                           AsnLysGluLeuIleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCys
                                                                                                                                                                                                                                                                                                                                                                                                              CAGGGGGGCCCAGTGGAGATCCTGTCCTTCCTGTACCTGGGCAGTGCCTATCACGCTTCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTAGTGTGCCTGACAGTGCAGAATCCGGATGCAGCTCCTGTAGTACCCCTCTCTACGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ProGlyLeuCysGluGlyLysSerThrLeuValProThrCysIleSerGlnPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GCGCGCTCCACTCAAGTCTTCTTCTCCCAAGGAGGATATGAAGCGTTTTCGGCTTCCTGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ValAlaSerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeu-----Glu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisLysValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CGGCGCCGCCAAGGGCCCATGGGCCTGGAGCATATCGTGCCCAACGCTGAACTGCGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TTCGCTTTCAACGCCGGCCACATCGCGGCTCAGTGAACGTGCGCTTCAGCACCATCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                          -----GlyProThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeu 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CCTGAGCTGTGCAGCAAACAGTCCACC-----CCCACGGGGCTCAGCCTCCCCCTGAGT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGGACGGCGCCAAGCGCGACGGCACCCTTGGCCCTGGCCGCGGGCGCGCTCTGCCGAGAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysargargLeuGlnGlnAspLysValLeuIleThrGluLeuIleGlnHisSerAlaLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.95e-47
425.00
50.17%
34.32%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ------CysLeuProValAlaAsnIle-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      944
104
48
129
22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 278
                                                                                            869
                                                                                                                                                         809
                                                                                                                                                                                       255
                                                                                                                                                                                                                      749
                                                                                                                                                                                                                                                                                   689
                                                                                                                                                                                                                                                                                                                   215
                                                                                                                                                                                                                                                                                                                                                632
                                                                                                                                                                                                                                                                                                                                                                                195
                                                                                                                                                                                                                                                                                                                                                                                                               572
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            157
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           452
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                218
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             158
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          98
```

```
б
                                   밁
                                                               δ
                                                                                                        밁
                                                                                                                                       Ş
                                                                                                                                                                                                                               Best Local Similarity:
Query Match:
                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-08-530-290-11 (1-1238)
                                                                                                                                                                                                                                                                  Percent Similarity:
                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                            ; MOLECULE TYPE: US-08-530-290-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-08-530-290-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 11
Patent No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TELEFAX: (415) 576-0300 INFORMATION FOR SEQ ID NO:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   FILING DATE: 10-FEB-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 930725
FILING DATE: 07-APR-1993
ATTORNEY/AGENT INFORMATION:
NAME: Bastian, Kevin L.
REGISTRATION NUMBER: 34,774
REGISTRATION NUMBER: 34,774
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                             SEQUENCE CHARACTERISTICS:
LENGTH: 1238 base pairs
TYPE: nucleic acid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    REFERENCE/DOCKET NUMBER: 08
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 576-0200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: WO PCT/GB94/00694
FILING DATE: 31-MAR-1994
PRIOR APPLICATION DATA:
APPLICATION NUMBER: GB 9402573.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: PatentIn Release #1.0, CURRENT APPLICATION DATA: APPLICATION NUMBER: US/08/530,290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IEM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Marshall, Christopher
APPLICANT: Ashworth, Alan
APPLICANT: Hughes, David Anthony
TITLE OF INVENTION: Methods for (
TITLE OF INVENTION: Therapeutic
                                                                                                                                                                                                                                                                                                         No..
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: Townsend and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NUMBER OF SEQUENCES:
                                                                                                                                                                                                                                                                                                                                                                                             TOPOLOGY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE: 14-DEC-1995
CLASSIFICATION: 435
                                                                                                                                                                                                                                                                                                                                                                                                              STRANDEDNESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ZIP: 94111-3834
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COUNTRY:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: San Francisco
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STREET:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            e 11, ...
No. 5958721
                                                                                                          168
                                 225 GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                930
                                                                                                        CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu
                                                                                                                                         LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCCCAAGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          California
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Application US/08530290
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Two Embarcadero
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          USA
                                                                                                                                                                                                                                                                                                                                                                            DNA
                                                                                                                                                                                                                                                                                                                                                                                                            single
                                                                                                                                                                                                                               3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GB 9307250.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Townsend and Crew LLP
Center, Eighth Floor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         084611-000000US
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Screening of Substances for Activity and Yeast for Use
                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                Gaps:
                                                                                                                                                                                                                                   Mismatches: Indels:
                                                                                                                                                                                                                                                                      Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 #1.30
                                                                                                                                                                                                              1238
99
62
116
22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Therein
76
                                   281
                                                                    58
                                                                                                        224
```

```
APPLICANT: Mannion, Jane
APPLICANT: Pan, Liqun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR
FILE REFERENCE: 210121.478C14
CURRENT APPLICATION UNMBER: US/09/702,705
CURRENT FILING DATE: 2000-10-30
NUMBER OF SEQ ID NOS: 1833
SOPTWARE: PASESEQ for Windows Version 3.0
SEQ ID NO 803
                                                                                                                                                                                                                                                                                                 RESULT 14
US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                           중 유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                      Sequence 803, Application Patent No. 6504010 GENERAL INFORMATION:
                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   342
                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                       939
                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          819
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    759
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              582
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                77
                                                                                                                                               Bangur, Chaitanya
Lodes, Michael A
Fanger, Gary
Vedvick, Tom
Carter, Darrick
Retter, Marc
                                                                                                                                                                                                       AMATION:
Wang, Tongtong
Tongtong
Tongtong
Tongtong
Tongtong
Tongtong
                                                                                                                                                                                                                                                                                                                                                          ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                                                                                                                                          ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                                                                                                                                                                                                                                                                                                                      ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                        MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                GTGCTGCTGCCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GTGGAGATCCTTCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GAGCCCTTGGACCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCCGGTTCCCCCCAGCGCCCACA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuCysGluGlyLysSerThrLeu--------ValProThrCysIleSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                  US/09702705
                                                                                                                                                                                                                           ເນ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ::
                                                                                                       FOR
                                                                                                         THE THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ------AsnIleGlγPro
                                                                                                         AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  148
                                                                                                                                                                                                                                                                                                                                                                                                      998
                                                                                                                                                                                                                                                                                                                                                                                                                                   279
                                                                                                                                                                                                                                                                                                                                                                                                                                                              938
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          878
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      199
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              179
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        159
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              219
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             641
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; LENGTH: 1238
; TYPE: DNA
; ORGANISM: Homo :
US-09-702-705-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                               밁
                                                                         8
                                                                                                       밁
                                                                                                                              Ś
                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                  S
                                                                                                                                                                밁
                                                                                                                                                                                          Ś
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                              片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-09-702-705-803 (1-1238
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                 819
                                                                                                                                                                                                                                                      200
                   280
                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                            642 GTGGAGATCCTTCCCTTCCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                                                                                                                                                                                   149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                522
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              97
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                59
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     39 ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  19
ThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle
                                                                                                                                                                                                                                                                                                                                                                                                      GAGCCCTTGGACCTGGACTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA
                                                                MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                       GTGCTGGTGCACTGCCAGGCGGCATCTCGCGGTCGGCCACCATCTGCCTGGCCTACCTG
                                                                                                                              ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle 259
                                                                                                                                                                                                                                                                                                         IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp
                                                                                                                                                                                                                                                                                                                                                           GlnPro-----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCGAGGAGGAGGTACGCGCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GCGGGCTACATCCTAGGTTCAGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsn
                                                ATGATGAAGAAACGGGTGAGGCTGGAGGAGGCCTTCGAGTTCGTTAAGCAGCGCCGCAGC 998
                                                                                                                                                                AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC
                                                                                                                                                                                          LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys
                                                                                                                                                                                                                        TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                  CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           LeuCysGluGlyLysSerThrLeu-------ValProThrCysIleSer 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGCACCGACATCTGCCTGCTCAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCCGAGCGGC----GGCAAGTGCCTGCTGCTGGACTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                   PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                                                                                                                                                                                                                                                                                                                                                                                 -CysLeuProValAla------AsnIleGlyPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         : Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1238
99
62
116
22
                                                                            279
                                                                                                                                                                                                                                                                                                                                                                         179
                                                                                                         938
                                                                                                                                                                 878
                                                                                                                                                                                                                                                                                                               199
                                                                                                                                                                                                                                                                                                                                                                                                      641
                                                                                                                                                                                                                                                                                                                                                                                                                                   159
                                                                                                                                                                                                                                                                                                                                                                                                                                                              581
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       96
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              76
                                                                                                                                                                                              239
                                                                                                                                                                                                                                                      219
                                                                                                                                                                                                                                                                                   758
                                                                                                                                                                                                                                                                                                                                          701
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          521
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             281
```

문

999

```
Ś
                                     밁
                                                                Ş
                                                                                                  밁
                                                                                                                              Ş
                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                           δ
                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                   片
                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 1
SOFTWARE: PASTSEQ for V
SEQ ID NO 803
LENGTH: 1238
TYPE: DNA
ORGANISM: Homo sapien
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-09-736-457-803 (1-1238)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-736-457-803
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Fan, Liqun
APPLICANT: Wang, Aijun
TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY AND
TITLE OF INVENTION: DIAGNOSIS OF LUNG CANCER
FILE REFERENCE: 210121.478C15
CURRENT APPLICATION NUMBER: US/09/736,457
CURRENT FILING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                     582
      160
                                                                    149
                                                                                                                                   135
                                                                                                                                                                     462
                                                                                                                                                                                             116 ---AsnSerValHisLeuLeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGly 134
                                                                                                                                                                                                                                    402
                                                                                                                                                                                                                                                                                                   342
                                                                                                                                                                                                                                                                                                                                                                    282
                                                                                                 522 TTCTGTTCTAAAACCAAGGCCCTGGCAGCCATCCCACCCCGGTTCCCCCCAGCGCCACA 581
                                                                                                                                                                                                                                                                                                                                                                                                                                   225
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   168
                                                                                                                                                                                                                                                                  97
                                                                                                                                                                                                                                                                                                                                 77
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         19 LeuGluSerGlyThrGluLysValLeuLleAspSerArgProPheValGluTyrAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            803, Application US/09736457
5. 6509448
                                  GAGCCCTTGGACCTGGAGCTGCAGCTCCTGTGGGACCCCACTACACGACCAGGAGGGTCCT
                                                                                                                                                                GCACCGACATCTGCCTCAAAAGGCGGCTATGAGAGGTTTTCCTCCGAGTACCCAGAA 521
ThrArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeu 179
                                                                     GlnPro----
                                                                                                                                                                                                                                                               SerLeuSerSerAspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPhe--- 115
                                                                                                                                                                                                                                                                                                                                ValAspIleAspCysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAla 96
                                                                                                                                                                                                                                                                                                                                                                                               GlnGlnAspLysValLeuIleThrGluLeuIle-----GlnHisSerAlaLysHisLys
                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrSerHisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeu 58
                                                                                                                               LeuCysGluGlyLysSerThrLeu--------ValProThrCysIleSer 148
                                                                                                                                                                                                                                AGCCTCCGCGAGGACAGCACCGTGTCGCTGGTGGTGCAGGCGCTGCGCCGCAACGCCGAG
                                                                                                                                                                                                                                                                                               GCTAAGGGCTCCGTGAGCCTGGAGCAGATCCTGCCCGCCGAGGAGGAGGTACGCGCCCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                 GCGGGCTACATCCTAGGTTCGGTCAACGTGCGCTGTAACACCATCGTGCGGCGGCGG----
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTGCCGAGCGGC---GGCAAGTGCCTGCTGCTGCTGCAGACCGTTCCTGGCGCACAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Carter, Darrick
Retter, Marc
Mannion, Jane
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Vedvick,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fanger, Gary
Vedvick, Tom
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Bangur, Chaitanya
Lodes, Michael A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Wang, Tongtong
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.12e-47
425.00
53.85%
33.11%
27.17%
                                                                  CysLeuProValAla-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1238
99
62
116
22
8
                                                                  -----AsnIleGlyPro 159
                                  641
                                                                                                                                                                                                                                461
                                                                                                                                                                                                                                                                                               401
                                                                                                                                                                                                                                                                                                                                                                  341
                                                                                                                                                                                                                                                                                                                                                                                                76
                                                                                                                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38
```

```
Ş
                                                                               밁
                                                                                                             Ş
                                                                                                                                                                 뮍
                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                 939
                                                                                                                                                                   879
                     280 ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIle 298
                                                                                                                        260
                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                  819
                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                          180
999 ATCATCTCGCCCAACTTCAGCTTCATGGGGCAGCTGCTGCAGTTCGAGTCCCAGGTG 1055
                                                                                                                                                                                                                                                                                     220 LeuProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCys 239
                                                                                                                                                                                                                                                                                                                                                                                                                  702
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               642
                                                                                                                 MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro 279
                                                                               ATGATGAAGAAACGGGTGAGGCTGGAGGCGCTTCGAGTTCGTTAAGCAGCGCCGCAGC 998
                                                                                                                                                                 GIGCIGGIGCACIGCCAGGCGGCAICTCGCGGTCGGCCACCATCIGCCTGGCCTACCTG 938
                                                                                                                                                                                        ValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIle 259
                                                                                                                                                                                                                                                                                                                                                                                                                  CTGGACGCCCTGGGCATCACGGCTCTGTTGAATGTCTCCTCGGACTGCCCAAAC---CAC 758
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGAGATCCTTCCCTCTACCTCGGCAGTGCCTACCATGCTGCCCGGAGAGACATG
                                                                                                                                                                                                                                                  AGCTCCTGGTTCATGGAAGCCATAGAGTACATCGATGCCGTGAAGGACTGCCGTGGGCGC 878
                                                                                                                                                                                                                                                                                                                                                                       PhelleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle 219
                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleGlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAsp 199
                                                                                                                                                                                                                                                                                                                                  TTTGAAGGACACTATCAGTACAAGTGCATCCCAGTGGAAGATAACCACAAGGCCGACATC
                                                                                                                                                                                                                                                                                                                                  818
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 701
```

Search completed: February 14, 2005, 11:12:22 Job time : 149.355 secs

```
-Q-/gn2 1/USFTO spool p/US10023345/runat 09022005_091209_25846/app_query.fasta_1.1294
-DBs-Published Applications NA -QFMT-Eastap -SUFFIX=p2n.rnpb -MINMATCH=0.1
-LOOPCL=0 -LOOPEXT=0 -UNITS-bits -START=1 -END=-1 -MATRIX=blosum62
-TRANS-human40.cdi -LIST=45 -DCCALICN=200 -THR SCORE=pct -THR MAX=100
-THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0
-MAXLEN=200000000 -USER=US10029345 @CGN 1 1 879 @runat 09022005 091209 25846
-NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NUSTE SCORES - WAIT -DSPBLOCK=100 -
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XCAPOP=10 -XGAPEXT=0.5
-FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Command line parameters:
-MODEL=frame+_p2n.model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    p2n.model -DEV=xlp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Xgapop 10.0 , Xgapext
Ygapop 10.0 , Ygapext
Fgapop 6.0 , Fgapext
Delop 6.0 , Delext
                          Published_Applications_NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              February 14, 2005, 10:56:55; Search time 403.187 Seconds (without alignments) 4419.632 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         BLOSUM62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109_COPY_1_302
1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MAHEMIGTQIVTERLVALLE.....PNFNFLGQLLDYEKKIKNQT 302
                                                                                                           /cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09A_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09C_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US09_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GenCore version 5.1.6 Copyright (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US10_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US11_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10757346
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

45	44	4.5	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14		12			9	80	7	6	ហ	4	ω	Ŋ	,	No.	Result
0	c	Ċ	634.5	63	869	N	N				ā	985	.4	504.	54	1545	55	55	ū	55	55	1552	55		55	55	55	55	55	55	55	55	55	55	S S	55	5	55	55	S	55	55	55	55	Score	
		œ				46.3	٥.	46.3		Ψ		ω	ა	٥,	8	8	9	9	9	9.	9.	9	9		9	9	9	٩	9	٩	9	9	9	9	9		9	Θ	9	9	9	9	φ	9	Match	Ϋ́
377	346		422	, -	· N	461		461		ឩ	47	45	3	2200	96	10	14	Ė	14	14	14	14	14		14	14	4	14	14	ř	79	76	62	54	54	5	5	49	20	73	9	99	1998	199	Length	
18	٦							18	18	17		13	9	17	17	17	18	18	18	18	18			18	18	18	18				18	17	17	18	17	ِ و	18	9	17	17		18	17	9) BB	,
-10-357-930-3240	-10-357-930-112	-10-357-930-2067	-10-357-930-207	-10-357-930-3206	0-357-930	-10-357-930-4134	-10-357-930-4100	-10-357-930-3241	-10-357-930-1124	-10-072-012-26	-10-220-120-28	S-10-005-858-	09-964-277-2	-10-072-012-	-10-296-115-52	-10-094-749-673	-10-357-930-2867	-10-357-930-2714	-10-357-930-2714	0-357-930-2692	-10-357-930-2691	-10-357-930-2681	-10-357-930-2666	-10-357-930-	-10-357-930-2130	-10-357-930-2130	-10-357-930-2108	0-357-930-2107	-10-357-930-2096	-10-357-930-208	-10-648-593-11	-10-343-357-17	-10-425-114-2	-10-377-072	S-10-377-072-2	09-816-494-1	us-10-370-715	09-964-277-1	-10-257-026-	S-10-168-506-2	S-10-072-012-2	-10-377-	77-072-2	60 - SI	ID	
3240	FZTT	2067,	20	32060,	10878,	41346,	equence 41000,	equence 324	equence 112	equence 265	equence 28,	equence 1,	20,	equenc	equence 520	equence 673	equence 28675,	equence 27149,	equence 27145,	e 26923,	equence 26912,	equence 26815,	equence 26669,	Ø	equence 2130	equence 21303,	equence 2108	equence 21071,	e 20969	equence 208	equence 115,	equence 17,	quence 2623	equence 25	Sequence 25, App	quence 1, Appli	Sequence 26	quence 1, 1	equence 1,	e 2	equence 257	equence 27	e 27	quence 3,	Description	

ALIGNMENTS

RESULT 1 US-09-816-494-3

```
; Sequence 3, Application US/09816494
; Patent NO. US20020034807A1
; GENERAL INFORMATION:
; APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
TITLE OF INVENTION: 96892 AND 21117, NOVEL DUAL SPECIFICITY
; TILE REFERENCE: 10448-030002
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT FILING DATE: 2001-03-23
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 1998
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-816-494-3
```

```
S
                                            δ
                                                                         문
                                                                                              Ś
                                                                                                                      밁
                                                                                                                                               S
                                                                                                                                                                                문
                                                                                                                                                                                                Ş
                                                                                                                                                                                                                               닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                  B
                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                         ş
                                                                                                                                                                                                                                                                                                                                                                                                                                          B
                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109_COPY_1_302 (1-302) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                                 109
 301
                                                 281
                                                                           781
                                                                                                    261
                                                                                                                             721
                                                                                                                                                      241
                                                                                                                                                                                 661
                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                    541
                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Scores
                                                                                                                                                                                                                                                                                                                                                              161
                                                                                                                                                                                                                                                                                                                                                                                        421
                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Н
                                        IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                        LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                           LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
 GlnThr
                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGCCCCCCCCCATCGCTATCGCCTACATCATG
                                                                                                                                                                              CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                              ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                       GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                    ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                     ThrLeuValProThrCysIleSerGinProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                       ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGGTTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               9.31e-193
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               001
                                                                                                                                                                                                                                                                                                                                                                                                               160
                        900
                                                300
                                                                         840
                                                                                                   280
                                                                                                                           780
                                                                                                                                                     260
                                                                                                                                                                              720
                                                                                                                                                                                                      240
                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                   600
                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                             180
                                                                                                                                                                                                                                                                                                                                                                                     480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                        220
                                                                                                                                                                                                                                                                                                                                                                                                                                          420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
```

```
APPLICANT: CHUNCHLIANTS.

APPLICANT: TSai, Fong-Ying

TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,

TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 4993

TITLE OF INVENTION: AND USES THEREFOR

FILE REFERENCE: MPIO3-0180NMIM

CURRENT APPLICATION NUMBER: US/10/377,072

CURRENT FILING DATE: 2001-06-29

PRIOR APPLICATION NUMBER: US 60/215,370

PRIOR FILING DATE: 2001-06-29

PRIOR APPLICATION NUMBER: US 99/895,860

PRIOR APPLICATION NUMBER: US 99/723,806

PRIOR APPLICATION NUMBER: US 99/723,806

PRIOR APPLICATION NUMBER: US 99/723,806

PRIOR FILING DATE: 2000-01-28

PRIOR APPLICATION NUMBER: US 99/843,297

PRIOR APPL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 27, Application US/10377072
Publication No. US20040009501A1
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals In:
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
                                                            뫄
                                                                                                                     δ
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; FEATURE:
; NAME/KEY: CDS
; LOCATION: (1)...(1998)
US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109_COPY_1_302 (1-302) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Remaining Prior Application data removed .
NUMBER OF SEQ ID NOS: 114
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 27
LENGTH: 1998
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 1998
TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR APPLICATION NUMBER: US 09/815,419 PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
   41
                                                                                                                                    21
                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                       SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Rudolph-Owen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                   9.31e-193
1552.00
99.67%
99.34%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                            Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper or PALM.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        49933 MOLECULES
   60
                                                                   120
                                                                                                                                    40
                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                           20
```

ફ 밁

```
RESULT 3

US-10-377-072-27

Sequence 27, Application US/10377072

Publication No. US20040157221A9

GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Meyers, Rachel E.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: AND USES THEREFOR

FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                     841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              361
                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                906
                                          AND
                                        49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        240
                                                                                                                                                                                                                                                                                                                                                                                                                                     900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FEATURE: LOS

NAME/KEY: CDS

NAME/KEY: CDS

NAME/KEY: CDS

LOCATION: (1) ...(

US-10-377-072-27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
   S
                                 밁
                                                                    S
                                                                                                                  밁
                                                                                                                                               Ś
                                                                                                                                                                                        밁
                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                 á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-11-28
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-03-21
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR PILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Remaining Prior Application NUMBER OF SEQ ID NOS: 114
                                        361
                                                                           121
                                                                                                                  301
                                                                                                                                                     101
                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                          121
     141
                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                             41
                                                                                                                                                                                                                                                                                                                                                                                                                    61
                                                                                                                                                                                                                                                                                                                                                                                                                                                       21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                μ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FastSEQ for Windows Version
                                                              LeuAlaGlyGlyPheAlaGluPheSerArgCyBPheProGlyLeuCy8GluGlyLy8Ser
                                                                                                                                                                                                                                                                                       AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                           HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
     ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                          CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9.31e-193
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 data removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0011
```

밁 Ś 밁 ð B र् 밁 5 밁 ঠ 밁 ક 밁 ર્ 먕 S 문 ঠ 밁 8 밁 ક 밁 S

140

160

420

120

300

360

100

240 90 180 60 120 40

```
RESULT 4
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 257, Application US/10072012 Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR PILING DATE: 2001-01-31
                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                          APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                 APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      661
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          601
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                421
                                                                                                                                                                                                                                                                                                     Gangolli, Esha
Gangolli, Esha
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr. Raymond J.
Gusev, Vladimir Y.
Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CAGACT 906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrTleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                    Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                        Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Zerhusen, Bryan
                                                                                                                                                     Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
              믕
                                         Ś
                                                                           밁
                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                g
D
                                                                                                                                                                           Ş
                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                        Š
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: Pace...
SEQ ID NO 257
; SEQ ID NO 257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Remaining Prior Application data removed NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: DN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
ORGANISM: Homo
              601
                                                                                                                                                   481
                                                                                                                                                                                                                      421
                                             181
                                                                                                               161
                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                        361
                                                                                                                                                                                                                                                                                                                         101
                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                           301
                                                                                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                              19.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ш
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PatentIn Ver.
                              GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                          AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                           ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                             CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
              CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                    CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                     GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            9.89e-193
1552.00
1552.80
99.67%
99.34%
99.34%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        x US-10-072-012-257 (1-2071)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   - See File Wrapper or PALM.
```

180

120 40 180 60 240 80 300 1100 360 120 420 140 140 540

```
RESULT 5
US-10-168-506-2
Sequence 2, Application US/10168506
Sequence 2, Application US/2041
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MANVING, GERARD
APPLICANT: MANVING, GERARD
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: HILL, RON
APPLICANT: FIRMING
                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                     문
                                                                                   S
                                                                                                                                    밁
                                                                                                                                                                    ঠ
                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-168-506-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 2732
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: PLANÁGAN, PETER
TITLE OF INVENTION: MAMALIAN PROTEIN PHOSPHATASES
FILE REPERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Х
О
:
                                                                                                                                                                                                                            538
                                                                                                                                      865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            901
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          781
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        661
                                              859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     721
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
    61
                                                                                        41
                                                                                                                                                                                21
                                                                                                                                                                                                                                                                      μ
                                                                                                                                                                                                                            CAGACT 966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GinThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LygArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLygArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaTleAlaTyrIleMet
  AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                     HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  sapiens
                                                                                                                                                                                                                                                                                                                                                              1.57e-192
1552.00
99.67%
99.34%
99.34%
                                                                                                                                                                                                                                                                                                                                                                                   Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
                                                                                                                                                                                                                                                                                                                                                            Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
    80
                                              717
                                                                                          60
                                                                                                                                         657
                                                                                                                                                                                  40
                                                                                                                                                                                                                            597
                                                                                                                                                                                                                                                                        20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  900
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          840
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  780
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        720
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    220
                                                                                                                                                                                              Sequence 1, Application US/10257026

Publication No. US20040086859A1

GENERAL INFORMATION:
APPLICANT: Merck Patent GmbH

TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSP10KDMS
CURRENT APPLICATION NUMBER: US/10/257,026

CURRENT FILING DATE: 2003-11-07

NUMBER OF SEQ ID NOS: 3

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO 1

LEWING SERVING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
Alignment Scores:
                                              US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                       US-10-257-026-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                  LENGTH: 3059
TYPE: DNA
ORGANISM: Homo s
                                                              FEATURE:
NAME/KEY: CDS
LOCATION: (127)...(2121)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1438 CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301 GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                         sapiens
```

1437

300

1377

280

1317

260

1257

240

1197

220

1137

200

180

160

1077

140

120

897

100

777

```
성 음 성
           δ
                         멍
                                   δ
                                                   日
                                                                                                    음 성 음
                                                                                                                                            ঠ 🖁 ঠ
                                                                                                                                                                                  밁
                                                                                                                                                                                               성 유
                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                           В
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                         8
                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                   멍
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.:
                                                     907
                                                                               847
                                                                                           241
                                                                                                         787
                                                                                                                                  727
                                                                                                                                                             667
                                                                                                                                                                        181
                                                                                                                                                                                        607
                                                                                                                                                                                                  161
                                                                                                                                                                                                                 547
                                                                                                                                                                                                                                                                                               367
                                                                                                                     221
                                                                                                                                                201
                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                            487
                                                                                                                                                                                                                                                                     427
                                                                                                                                                                                                                                                                                                                         307
                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                 101
                                                                                                                                                                                                                                                                                                                                                    247
                                                                                                                                                                                                                                                                                                                                                                              187
                                                                                                                                                                                                                                                                                                                                                                                                       127
                                                                                                                                                                                                                                                                                                            18
                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                    ш
                                                   LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
 CAGACT
                                 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                             ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                         LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
              GlnThr 302
                                                                                                                                                                                                                                                                                             SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                ACTOTAGTOCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                            AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                 CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                          HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                             MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
 1032
                                                                                                                                                                                      TCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                              1.9e-192
1552.00
99.67%
99.34%
99.23%
17
                                                                                                                                                                                                                                                                                                                                                                                                                                x US-10-257-026-1 (1-3059)
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                             3059
300
1
1
0
                          1026
                                                                                                                                                                                                                             160
                                                                                                                                                                                                                                                       140
                                                                                                                                                                                                                                                                                 120
                                                    966
                                                                             906
                                                                                                        846
                                                                                                                                  786
                                                                                                                                                            726
                                                                                                                                                                        200
                                                                                                                                                                                      666
                                                                                                                                                                                                   180
                                                                                                                                                                                                                606
                                                                                                                                                                                                                                                                    486
                                                                                                                                                                                                                                                                                               426
                                                                                                                                                                                                                                                                                                           100
                                                                                                                                                                                                                                                                                                                        366
                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                               60
                                                                                                                                                                                                                                                                                                                                                                            246
                                                                                                                                                                                                                                                                                                                                                                                          40
뮍
        5
                    뮍
                                  Ş
                                               B
                                                            Ś
                                                                         밁
                                                                                       Š
                                                                                                      유
                                                                                                                                В
                                                                                                                                          Ś
                                                                                                                                                          В
                                                                                                                                                                     S
                                                                                                                                                                                     밁
                                                                                                                                                                                              δ
                                                                                                                                                                                                              В
                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                 망
                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                           Alignment Scores: Pred. No.:
                                                   1042
                                     181
                                                                161
                                                                                          141
                                                                                                        922
                                                                                                                  121
                                                                                                                                  862
                                                                                                                                                            802
                                                                                                                                              101
                                                                                                                                                                                      742
                                                                                                                                                                                                                682
                                                                                                                                                                                                                                                                    562
                                                                                                                                                                        81
                                                                                                                                                                                                  61
                                                                                                                                                                                                                            41
```

```
RESULT 7
US-09-964-277-1
; Sequence 1, Application US/09964277
; Patent No. US20020137170A1
; GENERAL INFORMATION;
APPLICANT: Luche, Ralf M.
; APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY
FILE REFERENCE: 200125.434
; CURRENT APPLICATION NUMBER: US/09/964,277
; CURRENT FILING DATE: 2001-09-25
; NUMBER OF SEQ ID NOS: 22
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 1
; LENGTH: 3496
; TYPE: DNA
; ORGANISM: Homo sapiens
US-09-964-277-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCygProLysProAspPhe
                                                                                                                                                      LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                               ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                  CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                   GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                          AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2.38e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DUAL-SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-09-964-277-1 (1-3496)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3496
300
                                                                                                1101
                                                                                                                                                         1041
             220
                                                                   200
                                                                                                                           180
                                                                                                                                                                                                                 981
                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                         921
                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                 861
                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                          801
                                                                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       40
                                                                                                                                                                                                                                                                                                                                                                                                                                                 741
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          681
```

```
Sequence 261, Application US/10370715B
Publication No. US20040258678A1
GENERAL INFORMATION:
PAtin Docket Preview
APPLICANT: BODARY SARAH C.
APPLICANT: BRISDELL HUNTE
APPLICANT: BRISDELL HUNTE
APPLICANT: SCHORNFELD JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, D.
APPLICANT: WU, THOMAS D.
                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                      TITLE OF INVENTION: Compositions and Methods for the Treatment of Immune TITLE OF INVENTION: Related Diseases
FILE REFERENCE: P1948R1-US
CURRENT APPLICATION NUMBER: US/10/370,715B
CURRENT FLING DATE: 2003-02-21
NUMBER OF SEQ ID NOS: 742
SEQ ID NO 261
LENGTH: 3521
TYPE: DNA
ORGANISM: Homo sapien
US-10-370-715B-261
                밁
                                         S
                                                                       밁
                                                                                      ঠ
                                                                                                                   문
                                                                                                                                        δ
                                                                                                                                                                   밁
                                                                                                                                                                                      გ
                                                                                                                                                                                                               US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 8
US-10-370-715B-261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          유 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ફ
                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                       Х
О.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1462
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1402
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1222
                                                                                                                      624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                241
                      744
                                                                       684
                                                                                                                                                                    564 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
81
                                              61
                                                                                               41
                                                                                                                                           21
                                                                                                                                                                                  1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RISDELL, HUNTE
FI JACKWAN, JANET
FI SCHOENPELD, JILL R.
FI WILLIAMS, P. MICKEY
FI WOOD, WILLIAM I.
FI WOOD, WILLIAM I.
                                    AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                   SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LygArgMetAgpMetSerLeuAgpGluAlaTyrArgPheValLygGluLygArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGACT 1467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                         2.41e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                                                                 x US-10-370-715B-261 (1-3521)
                                                                                                                                                                                                                                                    Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                                                                         Length:
Matches:
                                                                                                                                                                                                                                            00--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1461
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1401
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                              80
                                                                       743
                                                                                            60
                                                                                                                    683
                                                                                                                                                                    623
                                                                                                                                                                                         20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1341
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                    RESULT
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                            1404
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1104
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1044
                                                                                                                                                                                                                                                                                                                                                                                                                            1344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1224
                                                                                                                                                                                                                                                                                                                                                                                                    281
                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    804
```

```
Fequence 1, Application US/09816494

Patent No. US20020034807A1

GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFI
TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THE
FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

NUMBER OF SEQ ID NOS: 10

SOFTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 1

LENGTH: 3544
                                                                      US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-09-816-494-1
                                                                                            NAME/KEY: CDS
LOCATION: (58)
                                                                                                                                        TYPE: DNA
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1464 CAGACT 1469
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301 GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      864 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTAGTGCACTGTTTAGCTGGGATCTCCCGGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                            (589)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                              (2583)
  2.43e-192
Length:
  3544
                                                                                                                                                                                                                                                                                                                                                                                                                             THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1463
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1163
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1103
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1043
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         923
```

```
Score:
Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                      δ
                                                                   밁
                                                                                      δ
                                                                                                                   밁
                                                                                                                                  δ
                                                                                                                                                           망
                                                                                                                                                                                  δ
                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                               ₽
                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                             Ş
RESULT 10
                                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             US-10-029-345A-109_COPY_1_302 (1-302)
                                                                      1429
                                                                                                                                                                  1309
                                                                                                                                                                                                                                                                                                              1129
                                                                                                                                                                                                                  1249
                                                                                                                                                                                                                                                                1189
                                                                                                                                                                                                                                                                                                                                                            1069
                                                                                                                                                                                                                                                                                                                                                                                                           1009
                                             301
                                                                                                                                          261
                                                                                                                                                                                                                                       221
                                                                                                                                                                                                                                                                                      201
                                                                                                                                                                                                                                                                                                                                     181
                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                                                                                                                                                                                                                                          949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         21
                                         GlnThr 302
                      CAGACT 1494
                                                                                                                               LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                             LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                        GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACT
                                                                                 IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                                               CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                              ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAspGlyCysVal
                                                                                                                                                                                                                                                               ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                           IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                             CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                           ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CysSerGlnLysValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1552.00
99.67%
99.34%
99.23%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     300
1
0
                                                                                                                                                                                       260
                                                                                                                                                                                                               1308
                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                             1188
                                                                                                                                                                                                                                                                                                                                                           1128
                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                                                                                                           1068
                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                1368
                                                                                                                                                                                                                                                               1248
                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                         1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
```

```
δ
                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
Query Match:
밁
                                                                               밁
                                                                                                                   Ş
                                                                                                                                                                   망
                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                 US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                    Score:
                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; NAME/KEY: CDS
; LOCATION: (589)...
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR FILING DATE: 2001-04-25
PRIOR FILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR APPLICATION NUMBER: US 09/861,494
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR APPLICATION DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: FOR SEQ ID NO 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 25, Application US/10377072 Publication No. US20040009501A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Chun, Miyoung
APPLICANT: T881, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LENGTH:
                                                                                                                                                                      589
                                                                                 649
                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3544
                                                                                                                                                                                            1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
Meyers, Rachel E.
                                                                               HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                   ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
CACATTITGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Meyers, Rachel E.
Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            (2586)
                                                                                                                                                                                                                                                                                                  2.43e-192
1552.00
99.67%
99.34%
99.34%
17
                                                                                                                                                                                                                                                     x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                   Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    See File Wrapper
                                                                                                                                                                                                                                                                                                    0011
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      유
                                                                               708
                                                                                                                         40
                                                                                                                                                                   648
```

문

유 S

```
Sequence 25, Application US/10377072

| Sequence 25, Application US/10377072
| Publication No. US20040157221A9
| GENERAL INFORMATION:
| APPLICANT: Millennium Pharmaceuticals Inc.
| APPLICANT: Curtis, Rory A.J.
| APPLICANT: Logan, Thomas Joseph
| APPLICANT: Logan, Thomas Joseph
| APPLICANT: Glucksmann, Maria A.
| APPLICANT: Milliamson, Mark J.
| APPLICANT: Williamson, Mark J.
| APPLICANT: Rudolph-Owen, Laura A.
| APPLICANT: Chun, Miyoung
| TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
| TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND
| TITLE OF INVENTION: AND USES THEREFOR
| FILE REFERENCE: MPIO3-0180MNM
| CURRENT APPLICATION NUMBER: US/10/377,072
| CURRENT FILING DATE: 2003-02-27
| PRIOR APPLICATION NUMBER: US 09/895,860
                                                                                                                                                                                                                                                                                                                                                                    RESULT 11
US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                 1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                               CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIlysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAGGTGTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                      AND
                                                                                                        49933
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                      MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: DNA; ORGANISM: Homo Sapie; PEATURE: ; PEATURE: ; NAME/KEY: CDS; LOCATION: (589)...(205-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
                                                       र्
                                                                                                    밁
                                                                                                                                Ś
                                                                                                                                                                   뫄
                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,494
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-22
Remaining Prior Application data removed - Set
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: Fast
SEQ ID NO 25
LENGTH: 3544
                           1009
                                                               141
                                                                                                    949
                                                                                                                                         121
                                                                                                                                                                               688
                                                                                                                                                                                                                  101
                                                                                                                                                                                                                                                        829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               589
                                                                                                                                                                                                                                                                                                                                   769
                                                                                                                                                                                                                                                                                                                                                                                                            709
                                                                                                                                                                                                                                                                                           81
                                                                                                                                                                                                                                                                                                                                                                    13
                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   _
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FastSEQ for Windows Version
                                                                                                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                             ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                          LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                               H18IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGGCCCATGAGATGGAACTCAAATTGTTACTGAGAGGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                               GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                   AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                               CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                          Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.43e-192
1552.00
99.67%
99.34%
99.33%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           See File Wrapper or PALM
```

밁 Ś 문 ð B

1068

1008 140 120 888 100 828

948

60

90

40 648

708

र् 밁 중 유

ঠ 당 S 밁 ঠ 밁 र् 밁 5 밁 ঠ 밁 á

```
Sequence 26234, Application US/10425114

Publication No. US20040034888A1

GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
APPLICANT: Chou, Yihua
APPLICANT: Screen, Steven E
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cap. Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5313)B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28

NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26234
LENGTH: 3625
TYPE: DNA
COLUMN NUMBER OF SEQ ID NOS: 73128
                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
DB:
             S
                                     밁
                                                         S
                                                                               US-10-029-345A-109_COPY_1_302 (1-302) x US-10-425-114-26234 (1-3625)
                                                                                                                                                                                                   ; ORGANISM: Homo sapiens
; FEATURE:
; OTHER INFORMATION: Clone ID: LIB4119-028-H6_FLI
US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 12
US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                     No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1249
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1189
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1129
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1369
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
              21
SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                    ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CAGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC 1488
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAAGAAAAAAGACCTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1494
                                                                                                         2.53e-192
1552.00
99.67%
99.34%
99.34%
17
                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                    751
                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1428
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1368
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1248
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1188
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                             δ
                                                                                                                                                                                                                                                                                  맑
                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                     망
                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                   망
                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          뮰
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                         1472
                                                                                                                                                                                                                                                                                                                                       1412
                                                                                                                                                                                                                                                                                                                                                                                      1352
                                                                                                                                                                                                                                                                                                                                                                                                                                     1292
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1172
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1052
                                                                                                                                                                                             1592
                                                                                                                                                                                                                                          1532
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1112
                                                                                                                                                                                                                  301
                                                                                                                                                                                                                                                                281
                                                                                                                                                                                                                                                                                                                261
                                                                                                                                                                                                                                                                                                                                                               241
                                                                                                                                                                                                                                                                                                                                                                                                            221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        161
                                                                                                                                                                                                                                                                                                                                                                                                                                                           201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             992
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            932
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       752
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                            CAGACT 1597
                                                                                                                                                                                                                 GlnThr 302
```

```
RESULT 13

US-10-343-357-17

Sequence 17, Application US/10343357

Publication No. US20040058341A1

GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: YAO, Monique G.; BURFORD, Neil
APPLICANT: WANG, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANUHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LEE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: GRIFFIN, Jennifer A.; BAUGHN, Mariah R.
APPLICANT: YUE, Henry; WARREN, Bridget A.
APPLICANT: NGUYEN, Danniel B.; CHAWLA, Narinder K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC 1111
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 105:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1411
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1591
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1531
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1471
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1231
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1171
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             991
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           931
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
```

APPLICANT: KEARNEY, Liam TITLE OF INVENTION: PROTEIN PHOSPHATASES FILE REFERENCE: PI-0173 PCT CURRENT APPLICATION NUMBER: US/10/343,357 CURRENT FILING DATE: 2003-01-28

```
á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                  밁
                                                                   5
                                                                                                           용
                                                                                                                                    श्च
                                                                                                                                                                      몽
                                                                                                                                                                                                               र्
                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                      ঠ
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                              ঠ
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      , NAME/KEY: misc_feature
, OTHER INFORMATION: Inc
US-10-343-357-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Percent Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CURRENT FILING DATE: 2003-01-28
PRIOR APPLICATION NUMBER: PCT/US01/23716
PRIOR PRILING DATE: 2001-07-26
PRIOR PPLICATION NUMBER: US 60/221,679
PRIOR PPLICATION NUMBER: US 60/223,272
PRIOR PPLICATION NUMBER: US 60/223,272
PRIOR FILING DATE: 2000-08-03
PRIOR PILING DATE: 2000-08-10
PRIOR PILING DATE: 2000-08-10
PRIOR PPLICATION NUMBER: US 60/226,728
PRIOR APPLICATION NUMBER: US 60/226,728
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR PILING DATE: 2000-08-18
PRIOR APPLICATION NUMBER: US 60/229,254
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR APPLICATION NUMBER: US 60/231,366
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
PRIOR PILING DATE: 2000-08-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LENGTH: 3766
TYPE: DNA
ORGANISM: Homo &
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: PERL Program 
EQ ID NO 17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 20
                                                                                                                                                                                                                                                                                                                                                                                                            658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   865
                                                                                                                                                                                    838
                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                           778
                                                                                                                                                                                                                                                                                                                                    718
                                                                        141
                                                                                                             898
                                                                                                                                                 121
 161
                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                      13
                                                                                                                                                                                                                                                                                                                                                                                                                                  41 HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               μ
ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                  GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                         AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                    CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                            AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                           CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                           ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                    ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Incyte
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.69e-192
1552.00
99.67%
99.34%
99.34%
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IJ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 x US-10-343-357-17 (1-3766)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3766
                                  1017
                                                                      160
                                                                                                             957
                                                                                                                                                                                  897
                                                                                                                                                                                                                                                           837
                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                    777
                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                         717
                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             20
```

```
S
                                                   밁
                                                                              Ś
                                                                                                                 밁
                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                           US-10-029-345A-109_COPY_1_302 (1-302)
                                                                                                                                                                                                                             Query Match:
                                                                                                                                                                                                                                            Best Local Similarity:
                                                                                                                                                                                                                                                            Percent Similarity:
                                                                                                                                                                                                                                                                                            Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                         ; TYPE: DNA
; ORGANISM: Homo
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 14
US-10-648-593-115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           멼
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                   GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS THAT
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
                                                                                                                                                                                                                                                                                                                                                                                                        SOFTWARE: PatentIn version 3.2 SEQ ID NO 115
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 115, Application US/10648593 Publication No. US20040106132A1
                                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 4790
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1198
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1078
                                                 301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181
                                                                                                             184 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
41 HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                               1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAGACT 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                         sapiens
                                                                                                                                                                                                                           4.03e-192
1552.00
99.67%
99.34%
99.23%
                                                                                                                                                                            x US-10-648-593-115
                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                               001
                                                                                 40
                                                                                                                 243
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1437
                                                   303
                                                                                                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1317
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1197
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1137
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1257
```

```
GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

ITITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THE TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT FILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,862
                                                                                                                                                                                                                                                                                                              US-10-357-930-20824

US-10-357-930-20824

; Sequence 20824, Application US/10357930

; Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                                                                                                                                                    1084
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1024
                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                964
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               904
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               844
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            664
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              724
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           604
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       484
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        424
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      364
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                    CAGACT 1089
                                                                                                                                                                                                                                                                                                                                                                                                                                                          GlnThr 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTAGTGCACTGTTTAGCTGGGATCTCCCGCCCCCCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTGTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTOTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                        THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1023
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             963
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             903
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           843
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        663
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         603
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       543
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      483
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    423
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
PRIOR PILING DATE: 2000-12-13
                       S
                                                               밁
                                                                                                 S
                                                                                                                                           吊
                                                                                                                                                                           Ş
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                    뫄
                                                                                                                                                                                                                                                                                                                                                                                                                            5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Š
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109_COPY_1_302 (1-302) x US-10-357-930-20824 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-357-930-20824
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          NAME/KEY: misc_feature
LOCATION: 1, 5144, 5144
OTHER INFORMATION: n =
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: DNA
ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              FEATURE:
                                                                 1129
                                                                                                                                               1069
                                                                                                                                                                                                                              1009
                                                                                                                                                                                      161
                                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                                                                                               688
                         201
                                                                                                                                                                                                                                                                    141
                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              \vdash
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
  IleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleLeu
                                                                                      GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyrThrCysProLysProAspPhe
                                                                                                                                                                                                                                                                                                                                              LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyThrGluLysValLeuLeuLleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                 CAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAATACCTGTCCAAAGCCTGACTTT
                                                                                                                                             CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGATG
                                                                                                                                                                       ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                   ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                            CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                               GACTGTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5145
n = 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           4.54e-192
1552.00
99.67%
99.34%
99.34%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A,T,C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
S
                                                                                                                                                                                                                                                                                                                                                                                               CTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.0
                                                                                                                                                                                                                                                                      160
                                                                                                                                                                                                                                                                                                                                                    140
                                                                 1188
                                                                                                                                               1128
                                                                                                                                                                                                                                1068
                                                                                                                                                                                                                                                                                                                1008
                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                               948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 20
```

밁 Ş 유

문 Ş δ

ß 8	용 왕	용 성	음 <i>칭</i>	B 8	밁
301 1489	281 1429	261 1369	241 1309	221 1249	1189
301 GlnThr 302 489 CAGACT 1494	IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn 300 	LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr 280	LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260	ProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysVal 240	ATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTTTG 1248
	488 88	30 128	368	1308	248

Search completed: February 14, 2005, 14:04:29 Job time : 420.187 secs

(Oldsn) whole send entity

```
Sequence 2, Application US/09816494

Patent No. 6664089

Patent No. 6664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR

FILE REFERENCE: 10448-030002

CURRENT APPLICATION NUMBER: US/09/816,494

CURRENT FILING DATE: 2001-03-23

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR FILING DATE: 2000-03-24

I NUMBER OF SEQ ID NOS: 10

SOPTWARE: FastSEQ for Windows Version 4.0

SEQ ID NO 2

LENGTH: 665

TYPE: PRT

ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Minimum
Maximum
      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Regult
No.
                                                                                                                                                                                                                                                                                                                                                      RESULT 1
US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Total number of hits satisfying
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Word size :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DB DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           geq
geq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                472
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query
Match Length DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           length: 0
length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OLIGO
Gapop 60.0 ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109
665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               513545 ведв,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   February
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                71.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Issued_Patents AA:*

1: /cgn2_6/ptodata/1/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/1/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/1/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/1/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/1/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/1/iaa/backfiles1.pep:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                MAHEMIGTQIVTERLVALLE.....
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2005, 12:12:08; Search time 45 Seconds (without alignments)
1103.147 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 74649064 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      chosen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    H
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                     ALIGNMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2, Appli
```

```
Ś
                                                    밁
                                                                        S
                                                                                                    B
                                                                                                                                 5
                                                                                                                                                                   밁
                                                                                                                                                                                         ş
                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Simi
Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity 100.0%; hes 472; Conservative (
 614
                           614
                                                       554
                                                                                                              494
                                                                                                                                         494
                                                                                                                                                                    434
                                                                                                                                                                                               434
                                                                                                                                                                                                                          374
                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                  314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED 373
                                                                                                                                                                                                                                                                                                                                                                                               254
                                                                                                                                                                                                                                                                                                                                                      254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                       SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                 HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                       TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                             TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                      IAIAYIMKRMDMSLDEAYREVKEKRPTISPNENFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                     TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                             TAORSLLSPLHRSGSVEDNYHTSFLFGLSTSOOHLTKSAGLGLKGWHSDILAPOTSTPSL
                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                          SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                  LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    71.0%; Score 472; DF 100.0%; Pred. No. 0; tive 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                     0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                      433
                                                        613
                                                                                 613
                                                                                                              553
                                                                                                                                                                    493
                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                          553
                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                  373
```

Search completed: February 9, 2005, 12:29:30 Job time : 45 secs

inis Page Biank (uspto)

```
RESULT 1

US-09-816-494-3

(Sequence 3, Application US/09816494

(Patent No. 6664089

(GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Minimum
Maximum
                                                                                                                                                                                                                                                                      Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               -MODEL=frame+_p2n.model -DEV=xlp
-Q-/cgn2_1/USPTO_spool_p/US10029345/runat_09022005_091322_26420/app_query.fasta_1.839
-Q-/cgn2_1/USPTO_spool_p/US10029345/runat_09022005_091322_26420/app_query.fasta_1.839
-DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=olip2n.rni -MINMATCH=0.1 -LOOPCL=0
-LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=01igo -TRANS=human40.cdi
-LIST=1000 -DOCALIGN=200 -THR_SCORE=quality -THR_MIN=75 -ALIGN=50 -MODE=LOCAL
-OUTFMT=pto -NORM=ext.,-HEARSIZE=500 -MINLENG -MAXLENG=200000000
-USER=US10029345_@CGN*1_1105_@runat_09022005_091322*56420 -NCPU=6 -ICPU=3
-NO_MMAD -LARGEOUERY -NEG_SCORES=0 -WALT -DSPELOCK=100 -LONGLOG
-DEV_TIMEOUT=120 -MARN_TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60 -FGAPOP=6
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELOP=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Command line parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Post-processing: Listing first 1000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Title:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OM protein -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                            Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             DB DB
                                                                                                                                                                                                                                                                      Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         eeq
eeq
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                of hits
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                nucleic search,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         length:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Xgapop 60.0 , X
Ygapop 60.0 , X
Fgapop 6.0 , I
Delop 6.0 , I
                                                                                                                                                                                                                                                                      Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                OLIGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    February 14,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Issued_Patents_NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1202784 seqs,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    MAHEMIGTQIVTERLVALLE......
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Copyright
                                                                                                                                                                                                                                                                                                                                                                                                                                /cgn2_6/ptodata/1/ina/5A_COMB.seq:*
/cgn2_6/ptodata/1/ina/5B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/6B_COMB.seq:*
/cgn2_6/ptodata/1/ina/PCTUS_COMB.seq:*
/cgn2_6/ptodata/1/ina/backfiles1.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Batisfying
                                                                                                                                                                                                                                                                      Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2000000000
                                                                                                                                                                                                                   1998
3544
                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GenCore version
(c) 1993 - 2005
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2005, 11:04:42; Search time 291 Seconds (without alignments)
3739.258 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                using
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Xgapext 60.0
Ygapext 60.0
Fgapext 7.0
Delext 7.0
                                                                                                                                                                                                                   44
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      818138359 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                chosen
                                                                                                                                                                                                                                                                      IJ
                                                                                                                                                                                                                   US-09-816-494-3
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         summaries
                                                                                                                                                              ALIGNMENTS
                                                                                                                                                                                                                                                                                                                             SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     5.1.6
Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  .LGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ٠,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ċ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                N
                                                                                                                                                                                                                 Sequence
Sequence
                                                                                                                                                                                                                                                                      Description
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665
                                                                                                                                                                                                                 Appli
Appli
                                                                                 Ś
                                                                                                                       밁
                                                                                                                                                         S
                                                                                                                                                                                               맑
                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                             á
                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109 (1-665) x US-09-816-494-3 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-816-494-3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQ ID NOS: 10
SOFTWARE: FASTSEQ for Windows Version
SEQ ID NO 3
LENGTH: 1998
TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 60/191,858
PRIOR FILING DATE: 2000-03-24
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY TITLE OF INVENTION: PHOSPHATASE MOLECULES AND USES THEREFOR FILE REFERENCE: 10448-030002
                                                   659
                                                                                                                                                                                                540
                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                      481
                                                                                                                                                                                                                                                                                                                                              421
                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                    361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241
                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                           ArgIleLeuPróAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                           heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                           GCAGCAGAATGGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                   -GlnGlnAsnGlŸīleGlyTyrValLeuAsnAlaSerTyr-ThrEysProLysProAspP
                                                                                                                                                                                                                                                                                                                                              ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                      CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
99.40%
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0 04
```

8

120 40 20

180

. . .

7

180

480

200 539

240

718

220 598

658

160

140

360

420

120

300

```
rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG 620
                                                                                                                                                                               CTGCCTĂĊĂĠĊŦĠĊĂĠĊĊĂĠĊŦĠĊĊĊĂĊŦŦĠĊĠĠĀĊĀĊĈĂĂĠŦĊŦĂŦŤĊŦĠŦĠĊĠĊĀĠĠĊ 1798
                                                                                                                                                                                                                                                                          erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    acrcesariarcrises ecceccasa corcratece ericectric de case as corces arrivirs
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2}\frac{1}{2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rarcircoacricoarcoaagrogoagocorogaagaacaarracoacaccagocricocririros
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerbroLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             adadcaadocdarrecarredoreadaaccadecadecadecacececeadadorecerri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      a chade characteric cocción relación de la marca de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario del compario del compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario de la compario del la compario de la compario de la compario de la compario de la compario de la compario de la compario del la compario de la compario de la compario de la compario de la compario del la compario del la compario de la compario de la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario del la compario de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rerechearcheaneariscririse an inciración de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de contractor de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerLeuAspIleLysSerValSerTyrSerAlaGerMetAlaAlaSerLeuHisGlyp 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rcágrigogérigeácefereciscaga a desergión de a capacita de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de constructivos de
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                recenhecenece a construction de la recentración de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     cergracedacreraceracecage acceptance of the contract of the contract of the certain contract of the certain contract of the contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain contract of the certain co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Arca Accrercic cierci circi cincia de de consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la consensor de la conse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              a CCAGA CTGGA GCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              rgaaghgarggachigichtriagargaagcrrheagarrrggaahachaaaaagaccra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rggatatcááátcágtítícátáttcágcéágcátggcágcátcóttácátggct
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                  1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1138
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1078
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          J Sequence 1, Application US/09816494

Patent No. 664089

GENERAL INFORMATION:

APPLICANT: Meyers, Rachel A.

TITLE OF INVENTION: 38692 AND 21117, NOVEL DUR

TITLE OF INVENTION: PHOSPHATASE MOLECULES AND

CURRENT APPLICATION UMBER: US/09/816,494

PRIOR APPLICATION NUMBER: US 60/191,858

PRIOR APPLICATION NUMBER: US 60/191,858

NUMBER OF SEQ ID NOS: 10

SOFTMARE: FastSEQ for Windows Version 4.0

LENGTH: 3544

TYPE: DNA

ORGANISM: Homo Sapiens

FEATURE:

NAME/KEY: CDS

LOCATION: (589)...(2583)

US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            RESULT 2
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             片
889 GÁCTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41 HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1919
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1979 AAATCATTGAGGTCTCC 1995
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1859
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1799
                                                                      AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                           CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   luLysGlnPhelysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  aaaagcagrittaaacgcagaagctgccaaatggaatttggagagaggatcatgtcagaga
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DUAL SPECIFICITY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3544
663
0
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                            888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1858
```

5 8 8

Д Ś В S 밁 S 밁 Ş 밁 δ В Ś 片 Ś В ঠ В Ś 밁 Ś 밁 Ś 8 Ś B δ В Ś ₽ Ś 밁 δ 뭐

1679

1619

560

1559

540

1499

500

520

1379

1319

460

1199

420

1139

380

400

1079

1019

340 959

320 899 300 839 280

\$ B

_	480 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500
	460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480
	440 BnLyBLeuCyBGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
	420 heSerSeljakajinaspalaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
	400 heSericung ieLysserValserTyrSerAlaserMetAlaAlaserLeuHisGlyP 420
一次を変	380 euSergiviéuHisLeuSerAlaAspArgLeuGluAépSérÄsmLysLeuLysArgSerP 400
	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
	340 roCygAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
	320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
-	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
	280 hrīleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
	260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280
	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260
	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240
	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
	გ <u>—</u>
· · · · · · · · · · · · · · · · · · ·	161 ArgilājeuProAsnLeuTyrLeuGlyCysGlnÄrģlapvalLeuAsnLysGluLeuIle 180
- #	141 ThrEdWalProThrCysIleSerGlnProCysEddProValAlaAsnIleGlyProThr 160
4.6	121 LeuAlaGlyGlyPheAlaGluPheSerArgCyáPhajáróGlyLeuCyaGluGlyLyBSer 140

밁 ş 유정 밁 S 문 S

8 8 8 8 8 8 8

중 유

8 8 8 8 8 8 8

lip2n.rni	.rni	Page	ω
		The state of the s	
	2027 AGAGCAAGCQATTGCATTCGGT		86
Ì	500 euSerProLeuHisArgSerGl		•
Ĭ	2087 TATCTCCACTGCATCGAAGTGG	GAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG 2146	46
•	520 lyLeuSerThrSerGlnGlnHi	lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540	0
	2147 GCCTTTCCACCAGCCAGCAGCA	ACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC 2206	90
	540 isSerAspIleLeuAlaProGl	1sSerAspIleLeuAlaProGinThrSerThrProSerLeuThrSerSerTrpTyrPheA 560	0
	2207 ACTCGGATATCTTGGCCCCCCA	ACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCTGGTATTTTG 2266	66
•	560 laThrGluSerSerHisPheTy	laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS 580	0
Ĭ	2267 CCACAGAGTCCTCACACTTCTA	ACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT 2326	26
	580 erAlaTyrSerCysSerGlnLe	erAlaTyrSerCygSerGlnLeuProThrCygGlyAspGlnValTyrSerValArgArgA 600	0
Ū	2327 CTGCCTACAGCTGCAGCCAGCT	recceacifece	98
`	600 rgGlnLysProSerAspArgAl	rgGlnLysBroSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG 620	٥
J	2387 ĠĠĊĀĠĀĀĠĊĊĀĀĠTĠĀĊĀĠĀĠĊ	GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGGCGGAGCTGGCATGAAGAGAGAG	46
•	620 luLysGlnPheLysArgArgSe	luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640	0
	2447 AAAAGCAGTTTAAACGCAGAAG	AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA 2506	90
	640 snArgSerArgGluGluLeuGl	snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	0
	2507 ACAGGTCACGGAAGAGCTGGC	ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGTC	66
	660 luIleIleGluValSer 665	Ť	
Ü	2567 AAATCATTGAGGTCTCC 2583	. •	

В

S F δ 밁 8 Ъ

Search completed: February 14, 2005, 14:08:29 Job time : 298 secs

na desta de A la companya de E secondo

This Page Blank (uspto)

```
We
```

```
Result
No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Minimum DB seq length: 0
Maximum DB seq length: 200000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          OM protein - protein search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Word size :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                       Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.
                                                                                                                                                                                                                                                                                                       Score
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Published Applications AA:*

1: /cgn2_6/ptodata/1/pubpaa/US07 PUBCOMB.pep:*

2: /cgn2_6/ptodata/1/pubpaa/US07 NEW PUB.pep:*

3: /cgn2_6/ptodata/1/pubpaa/US06 NEW PUB.pep:*

4: /cgn2_6/ptodata/1/pubpaa/US07 NEW PUB.pep:*

5: /cgn2_6/ptodata/1/pubpaa/US07 NEW PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US08 NEW PUB.pep:*

6: /cgn2_6/ptodata/1/pubpaa/US08 PUBCOMB.pep:*

7: /cgn2_6/ptodata/1/pubpaa/US08 PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US08 PUBCOMB.pep:*

9: /cgn2_6/ptodata/1/pubpaa/US09 PUBCOMB.pep:*

10: /cgn2_6/ptodata/1/pubpaa/US09 PUBCOMB.pep:*

11: /cgn2_6/ptodata/1/pubpaa/US09 PUBCOMB.pep:*

12: /cgn2_6/ptodata/1/pubpaa/US09 PUBCOMB.pep:*

13: /cgn2_6/ptodata/1/pubpaa/US09 PUBCOMB.pep:*

14: /cgn2_6/ptodata/1/pubpaa/US10 PUBCOMB.pep:*

15: /cgn2_6/ptodata/1/pubpaa/US10 PUBCOMB.pep:*

16: /cgn2_6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

17: /cgn2_6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

18: /cgn2_6/ptodata/1/pubpaa/US10 NEW PUB.pep:*

19: /cgn2_6/ptodata/1/pubpaa/US10 NEW PUB.pep:*
                                                                                                                                                                                                                                                                                                  Query
Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       OLIGO
Gapop 60.0 , Gapext 60.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           665
1 MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            February 9, 2005, 12:25:39 ; Search time 135 Seconds (without alignments) 1604.386 Million cell updates/sec
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1373511 seqs, 325702437 residues
        US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GenCore version 5.1.6
Copyright (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                       Length DB
        155
155
155
155
155
155
155
      US-09-964-277-21
US-09-816-494-2
US-09-816-494-2
US-09-816-494-2
US-09-816-494-2
US-09-816-277-2
US-09-816-277-2
US-10-094-749-2312
US-10-072-012-681
US-10-072-012-681
US-10-168-506-14
US-10-168-506-7
US-10-257-026-2
US-10-648-593-247
US-10-648-593-247
US-10-648-593-247
                                                                                                                                                                                                                                                                                                       ü
                                                                                                                                                                                                                                                                                                                                                                    SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     24
Sequence 21, Appl
Sequence 2, Appli
Sequence 2, Appli
Sequence 23, Appl
Sequence 26, Appl
Sequence 680, Appl
Sequence 681, Appl
Sequence 14, Appl
Sequence 7, Appli
Sequence 7, Appli
Sequence 240, Appl
Sequence 240, Appl
Sequence 240, Appl
Sequence 247, Appl
                                                                                                                                                                                                                                                                                                    Description
```

дb	Ş	8 8	문 5	§ §	Ş	B 8	망	Ş ;	\$ 8	B 8	Quer Best Matcl	RESULT US-09- US-09- Separate Pate GENE App App APP CUR CUR CUR CUR CUR CUR CUR CUR CUR CUR		0000011111
	614	554 406	,A (286 494	w	374 226	166	314	254	194 46	y Match Local hes 47	1 964-27 ence 2 nt No. LICANT LICANT LICANT LICANT LICANT LICANT E REFE E REFE E REFE E REFT A RENT F BBER OF TWARE OF ID NO. ID		4 472 5 4 472 6 472 7 394 9 258 9 258 1 108 109 152 108 108 108 108 108 108 108 108 108 108
HEES	æ	ST-Z	TAORS			თ—თ				10 10 10 10 10 10 10 10 10 10 10 10 10 1	Simi 2;	77-21 21, Applica 21, Applica 1, US2002013 WFORMATION: T: Luche, R T: Wei, Bo INVENTION: ETRENCE: 200 APPLICATION FILING DATE F SEQ ID NO FILING DATE F SEQ ID NO		
SPFEKQFKRRSCQMEF		SWYFATESSHFYSASAIYGG	F	5 3	TTLDGTNKLCQFSPVQ	VQALSGLI QALSGLI		EKPNEPVI	AYIMKRMI	14140 	rity nser	e 7: 412 1 714		111.0 38.8 116.2 9.1
CRRSC(CRRSC	SHFYS.	IRSGS	QFSPVI	QFSPV	ILSADI ILSADI	PAVSE	PAVSE	OMSED OMSED	ESHFLRVPVNDS	71.0 100. ative	on US 70A1 70A1 8.P-16 8.434 7		690 6690 672 677 677
DME FO	MEF	ASAI1	VED I	ZELSI	DELSEQTI	STEDS	9GOK	GOK	EAYRI		.04;			15 15 15 15 15 15
	GES IMSENRSREELGKVGSQSSFSGSN	AIYGGSASYSAYSCSQLPTCGDQYYSVRRRQKPSDRADSRRS 	SPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPS	T.FGL.STSOOHLTKSAGLGLK	PETSPDKEEASIPKKLQTARPS	PLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFS: 		SETPLSPPCADSATSEAAGORPVHPAS	AIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL 	DSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAG 	Score 472; Pred. No. Mismatc	.64277 L-SPECIFICITY PHOSPHATASE 1909/964,277 25 Version 4.0	ALIGNMENTS	US-10-072-012-679 US-10-072-012-703 US-10-0425-114-54204 US-10-072-012-256 US-10-072-012-258 US-10-108-260A-4872 US-09-964-277-7 US-10-072-012-683 US-10-072-012-683 US-09-764-853-578
51	EIIEVS 665	RQKPSDRADSRRSW RQKPSDRADSRRSW)QSKRLHSVRTSSSG HSDILAPOTSTPSL	KRLHSVRTSSS	FSSSEDALEYYKPS	VPSVPSVQPSLLED	VPSVPSVQPSLLED	ONOTGASGPKSKLKL	VLVHCLAGISRSAT	0			Sequence 679, A Sequence 703, A Sequence 54204, Sequence 256, A Sequence 258, A Sequence 1259, Sequence 7, Appl Sequence 7, Appl Sequence 682, A Sequence 683, A Sequence 578, Ap
		613 465	0 (345	9	433 285	N	7 (313	105				App App App App App App App App

RESULT 2

```
; Sequence 2, Application US/09816494
; Patent No. US20020034807A1
; GENERAL INFORMATION;
; APPLICANT: Meyers, Rachel A.
; TITLE OF INVENTION: 38692 AND 21117, NOVEL DUAL SPECIFICITY
; TITLE OF INVENTION: 9HOSPHATASE MOLECULES AND USES THEREFOR
; TITLE OF INVENTION UNMERR: US/09/816,494
; CURRENT APPLICATION NUMBER: US/09/816,494
; CURRENT APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR APPLICATION NUMBER: US 60/191,858
; PRIOR FILING DATE: 2000-03-24
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: FastSEQ for Windows Version 4.0
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 2
; LERUTH: 665
                                                                                                                                                                                                                                                               RESULT 3
US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                       뭐
                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-09-816-494-2
                                                                                                                                                                                                      Sequence 2, Application US/09964277
Patent No. US20020137170A1
GENERAL INFORWATION:
                           APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-09-816-494-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match
Best Local :
                      TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Local
                                                                                                                                                                                                                                                                                                                                              614 HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                                                                                                                        554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            al Similarity 100.0%; Score 472; Dal Similarity 100.0%; Pred. No. 0; 472; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                       TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                              TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDTLAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                             HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKR1.HSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCPKPDF1PESHFLRVPVNDSFCEKILPWLDKSVDF1EKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IAIAYIMKRMDMSLDEAYRFVKEKRPTISDNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCPKPDF1PESHFLRVPVNDSFCEK1LPWLDKSVDF1EKAKASNGCVLVHCLAG1SRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           9; Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                                                                                                                                                                                                                                                                                                                                                                                 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                313
APPLICANT: SEKI, NAOHIKO
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: YOSHIKAWA, TSUTOMU
APPLICANT: OTSUKA, MOTOVUKI
APPLICANT: NAGAHARI, KENJI
APPLICANT: NAGHHO, YASUHIKO
TITLE OF INVENTION: NOVEL FULL-LENGTH CDNA
FILE REFERENCE: 084335/0160
CURRENT APPLICATION NUMBER: US/10/094,749
CURRENT FILLING DATE: 2002-03-12
PRIOR APPLICATION NUMBER: 60/350,435
PRIOR FILING DATE: 2002-01-24
PRIOR APPLICATION NUMBER: JP 2001-328381
PRIOR FILING DATE: 2001-09-14
NUMBER OF SEQ ID NOS: 3381
SOFTWARE: PATENTIN VET: 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                         GENERAL INFORMATION:
APPLICANT: ISOGAI,
APPLICANT: SUGIYAM
                                                                                                                                                                                                                                                                                                                                       APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                               APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
```

OTSUKA, KAORU NAGAI, KEIICHI IRIE, RYOTARO TAMECHIKA, ICHIRO

ISONO, I YAMAMOTO, JUN

WAKAMATSU, AI SATO, HIROYUKI SUGIYAMA, TOMOY OTSUKI, TETSUJI

TAKAO

TOMOYASU

SHIZUKO

JUN-ICHI

```
RESULT 4
US-10-094-749-2312
Sequence 2312, Application US/10094749
Publication No. US20030219741A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens US-09-964-277-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                614
                                                                                                                                                  614
                                                                                                                                                                                      554
                                                                                                                                                                                                                        554
                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                              494
                                                                                                                                                                                                                                                                                                                               434
                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                       374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254 TATAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISDNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFTEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194 TCPKPDF1FESHF1RVPVNDSFCEK1LPWLDKSVDF1EKAKASNGCV1VHCLAG1SRSAT
                                                                                                                                       HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                             TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                           HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                                                                     TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                        TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                              SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                        SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 472; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ВB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        9;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    o;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0,
                                                                                                           665
                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                613
                                                                                                                                                                                                                  613
                                                                                                                                                                                                                                                    553
                                                                                                                                                                                                                                                                                      553
                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                          493
                                                                                                                                                                                                                                                                                                                                                                                               433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
```

```
RESULT 5
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              먉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; SEQ ID NO 2312
; LENGTH: 665
; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-094-749-2312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
             CURRENT APPLICATION NUMBER: US/10/377,072
CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR PILING DATE: 2000-11-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR APPLICATION NUMBER: US 09/843,297
                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 26, Application US/10377072 Publication No. US20040009501A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local
                                                                                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                  APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Tsai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335,
TITLE OF INVENTION: A8092, 46508, 16816, 1683
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
OR FILING DATE: 2001-06-29

OR APPLICATION NUMBER: US 60/215,370

OR APPLICATION NUMBER: US 09/723,806

OR APPLICATION NUMBER: US 09/723,806

OR APPLICATION NUMBER: US 60/187,455

OR FILING DATE: 2000-03-07

OR APPLICATION NUMBER: US 09/843,297

OR APPLICATION NUMBER: US 09/843,297

OR FILING DATE: 2001-04-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Local Similarity 100.0%; Fig. 172; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL 553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1A1AY1MKRMDMSLDEAYRFVKEKRPT1SPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                      Meyers, Rachel E.
Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                     Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 %; Score 472; DB
%; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                     6335, 50365, 21117,
16839, 49937, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                  GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Zerhusen, Bryan
APPLICANT: Patturajan, Meera
APPLICANT: Shimkets, Richard
                                                                                                                                                                                                                                                      RESULT 6
US-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭉
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local S
Matches 472
                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                       Sequence 680, Ap
Publication No.
                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                194
                                                                                                                                                                                                                                                                                                                                                       614
                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           494
                   Gangolli, Esha
Padigaru, Muralidha
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
```

Application US/10072012 o. US20040033493A1

Muralidhara

```
; TYPE: PRT
; ORGANISM: Homo
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR FILING DATE: 2000-04-26
PRIOR PELICATION NUMBER: US 90/861,801
PRIOR FILING DATE: 2001-05-21
PRIOR FILING DATE: 2001-05-21
PRIOR PELICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2000-05-19
PRIOR PILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR APPLICATION NUMBER: US 99/815,419
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2001-03-23
PRIOR FILING DATE: 2010-03-23
PRIOR FILING DATE: 2010-03-23
PRIOR FILING DATE: 2010-03-23
PRIOR FILING DATE: 2010-03-23
PRIOR FILING DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR PRIOR DATE: 2011-03-23
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Fast
SEQ ID NO 26
LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                          HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                       TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKKLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LHLEKPNEPVPAVSEGGOKSETPLSPPCADSATSEAAGORPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                               TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                              TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        71.0%; So ilarity 100.0%; I Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    score 472; DB
s; Pred. No. 0;
0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                              613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              253
                                                                                                                                                                                                                                                                                                                                                                        553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
```

Gusev, Vl

Taupier Jr, Raymond Gusev, Vladimir Y.

```
Ś
                                                                                                                                          S
                                                                                                                                                                             片
                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Loca
Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SEQ ID NO 680
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TYPE: PRT
ORGANISM: Homo sapiens
-10-072-012-680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SOFTWARE: PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2002-01-31 PRIOR APPLICATION NUMBER: 60/265,102
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICATION NUMBER: 60/266,767
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICATION NUMBER: 60/266,406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           FILING DATE:
554 TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                     494
                                                                   494
                                                                                                          434
                                                                                                                                            434
                                                                                                                                                                               374
                                                                                                                                                                                                    374 SPLVQALSGLHISADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                             254
                                                                                                                                                                                                                                                                                                                                                                                               194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                     194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                          254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Similarity
                                                                                                                                                                                                                                                                           LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKGAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                    TTLDGTIKKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                               SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                   LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                        TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Wolenc, Adam R
Pena, Carol E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Colman, Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2001-01-30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     71.0%; Score 472;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      <u>,</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DB 15; Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0
                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                          493
                                                                                                                                            493
                                                                                                                                                                               433
                                                                                                                                                                                                                                                    373
                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                                                                                                             313
```

```
; ORGANISM: Homo sapiens US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 7
US-10-072-012-681
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                   SOFTWARE: PatentIn Ver.
SEQ ID NO 681
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 681, I
Publication No.
 Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR PPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,517
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                         Remaining Prior Application data NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                     PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-02-02
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                  PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION NUMBER: 60/266,406
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRIOR APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                  TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                         FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 614 HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anderson,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patturajan,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Application US/10072012 b. US20040033493A1
71.0%; Score 472; ilarity 100.0%; Pred. No. Conservative 0; Mismatch
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Meera
                                                                                                                                                                                                                removed -
     Mismatches
                                                                                                                                                                                                              See File Wrapper
                                         15;
     0
                                         Length 665;
     0
     Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              613
     0
```

```
RESULT 8
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                           片
                                                                                           Ş
                                                                                                                              밁
                                                                                                                                                                                                                                                                          ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-168-506-14
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   á
                      S
                                                                                                                                                            გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION NUMBER: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: PATENTIN Ver. 2.1
SEQ ID NO 14
LENGTH: 665
TYPER: PTM
                                                                                                                                                                                                   Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 14, Application US/10168506
Publication No. US20040053229A1
                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: FLANAGAN, PETER
TITLE OF INVENTION: MAMMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT: PLOWMAN, GREGORY D. APPLICANT: MARTINEZ, RICARDO APPLICANT: WHYTE, DAVID APPLICANT: MANNING, GERARD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                        314
                                                         254
                                                                                             254
                                                                                                                                194
                                                                                                                                                                   194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194
LHLEKPNEPVPAVSEGGQKSETFLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                         IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEESPPEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEITEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTLDGTNKLCQPSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SUDARSANAM, SUCHA
                                                                                                                                                                                                 71.0%; Score 472; DB 15; ilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                      Length 665;
                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              599
                                                         313
                                                                                           313
                                                                                                                                253
                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        433
```

```
APPLICANT: INCYTE GENOMICS, INC.; TANG, Y.Tom
APPLICANT: ELLIOTT, Vicki S.; RAMKUMAR, Jayalaxmi
APPLICANT: WANO, Monique G.; BURFORD, Neil
APPLICANT: WANO, Yumei E.; STEWART, Elizabeth A.
APPLICANT: GANDHI, Ameena R.; ARVIZU, Chandra S.
APPLICANT: LIE, Ernestine A.; HAFALIA, April J.A.
APPLICANT: LU, Dyung Aina M.; TRIBOULEY, Catherine M.
APPLICANT: NUE, Henry; WARREN, Bridget M.
APPLICANT: NUENTION: PROTEIN B.; CHAMLA, Nariah R.
APPLICANT: KERANEY, Liam
TITLE OF INVENTION: PROTEIN PHOSPHATASES
FILE REFERENCE: PI-0.13 PCT
CURRENT FILING DATE: 2003-01-28
FRIOR APPLICATION NUMBER: US/10/343,357
CURRENT APPLICATION NUMBER: US/10/343,357
CURRENT APPLICATION NUMBER: US/0/221,679
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/221,679
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR APPLICATION NUMBER: US 60/223,272
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR FILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR PILING DATE: 2000-08-10
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
PRIOR APPLICATION NUMBER: US 60/224,309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-343-357-7
                                                                                                            US-10-343-357-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence 7, Application US/10343357 Publication No. US20040058341A1 GENERAL INFORMATION:
Matches 472;
                                                                                                                                                                                                                                                                                                 SEQ ID NO 7
                                                    Query Match
                                                                                                                                                                                                                                                                                                                       PRIOR APPLICATION NUMBER: US
PRIOR FILING DATE: 2000-09-08
NUMBER OF SEQ ID NOS: 20
SOFTWARE: PERL Program
                                                                                           FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID No. US20040058341A1 7480570CD1
                                                                                                                                                                                                                LENGTH: 665
TYPE: PRT
ORGANISM: Homo sapiens
                              Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
  Conservative
                                                                                                                                                                                                                                                                                                                                                      2000-09-08
OS: 20
                         71.0%;
                                                                                                                                                                                                                                                                                                                                                                                                           60/231,366
                              Score 472; ; Pred. No.
  °,
  Mismatches
                                                       BB
                                                    15;
<u>..</u>
                                                    Length 665;
  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             3
  0;
  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      493
```

S

194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT 253

```
Ś
                                                         밁
                                                                                   Ś
                                                                                                                    밁
                                                                                                                                            Ś
                                                                                                                                                                             밁
                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 10
US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8 B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ъ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                             ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                            US-10-257-026-2
                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Merck Patent GmbH
TITLE OF INVENTION: New dual specificity phosphatase
FILE REFERENCE: DUSPIOKDWS
CURRENT APPLICATION NUMBER: US/10/257,026
CURRENT FILING DATE: 2003-11-07
NUMBER OF SEQ ID NOS: 3
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 2, Application US/10257026 Publication No. US20040086859A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                        TYPE: PRT
ORGANISM: Homo sapiens
                                                         374
                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
434
                           434
                                                                                     374
                                                                                                                                                314
                                                                                                                                                                             254
                                                                                                                                                                                                          254
                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                       194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                   LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                            IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGFKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQYYSVRRRQKPSDRADSRRSW 613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTXSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                              IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIBKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEESPFEKQFKRRSCOMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TAORSILSPIHRSGSVEDNYHTSFIFGLSTSOOHLTKSAGIGLKGWHSDILAPOTSTPSI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
 TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                 TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                     LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                             71.0%; Score 472; 100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                  0
                                                                                                                                                                                                                                                                                                                               멂
                                                                                                                                                                                                                                                                                                                             15;
                                                                                                                                                                                                                                                                                                <u>,</u>
                                                                                                                                                                                                                                                                                                                           Length 665;
                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   313
                           493
                                                         433
                                                                                        433
                                                                                                                     373
                                                                                                                                                 373
                                                                                                                                                                              313
                                                                                                                                                                                                          313
                                                                                                                                                                                                                                                                     253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
```

```
멍
                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 11
US-10-648-593-240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                  밁
                                                                                                                                                               Ş
                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                        Ş
                                                                 맑
                                                                                             δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 240
LENGTH: 665
THE TENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 240, Application US/10648593 Publication No. US20040106132A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS TH
TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR
TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REFERENCE: D0273 NP
FILE REFERENCE: D0273 NP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                 554
                                                                                                   554
                                                                                                                                    494
                                                                                                                                                                    494
                                                                                                                                                                                                        434
                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                       374
                                                                                                                                                                                                                                                                                                         374
                                                                                                                                                                                                                                                                                                                                           314
                                                                                                                                                                                                                                                                                                                                                                            314
                                                                                                                                                                                                                                                                                                                                                                                                            254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HEESPFEKOFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                     HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                              LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                              IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                   TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQXFSDRADSRRSW
                                                                                                                                                        TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL 553
                                                                                                                                                                                                                       TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                           LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                              IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                 TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                        TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 71.0%; Score 472; Di
ilarity 100.0%; Pred. No. 0;
Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ۰,
     665
                                   665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                         493
                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                            433
                                                                                                                                                                                                                                                                                                                                                                                373
                                                                                                                                                                                                                                                                                                                                                                                                                313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553
                                                                      613
                                                                                                      613
                                                                                                                                        553
                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
```

```
Sequence 26, Application US/10377072
Publication No. US/20040157221A9
GENERAL INFORMATION:
APPLICANT: Millennium Pharmaceuticals In
APPLICANT: Curtis, Rory A.J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                              RESULT 13
US-10-377-072-26
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                       片
                                                                                                                                                                                                                                                                                                                                                                                                 ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-648-593-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US-10-648-593-247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/406,385
PRIOR FILING DATE: 2002-08-27
NUMBER OF SEQ ID NOS: 557
SOPTWARE: Patentin version 3.2
SEQ ID NO 247
LENGTH: 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 247, Application US/10648593
Publication No. US20040106132A1
GENERAL INFORMATION:
APPLICANT: Bristol-Myers Squibb Company
TITLE OF INVENTION: IDENTIFICATION OF GENES FOR PREDICTING ACTIVITY OF COMPOUNDS TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/OR TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS
FILE REPERENCE: D0273 NP
CURRENT APPLICATION NUMBER: US/10/648,593
CURRENT FILING DATE: 2003-08-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                   614
                                                                                                                                                                                                                                                                                                                                                                         554
                                                                                                                                                                                                                                                                                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                                                                                 494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      314
                                                                                                                                                                                                                                                                                               614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                               HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                         HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                       TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                             TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKFSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAORSLLSPLHRSGSVEDNYHTSPLFGLSTSOOHLTKSAGLGLKGWHSDILAPOTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         71.0%; Score 472;
100.0%; Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             멂
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     <u>.</u>
                                                                                                                                                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                   553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                         613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AND/OR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THAT
```

```
8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ĝ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ; ORGANISM: Homo US-10-377-072-26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT FILING DATE: 2003-02-27
PRIOR APPLICATION NUMBER: US 09/895,860
PRIOR FILING DATE: 2003-02-27
PRIOR PPLICATION NUMBER: US 09/895,860
PRIOR PPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR PILING DATE: 2000-01-28
PRIOR PILING DATE: 2000-01-28
PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR FILING DATE: 2000-03-07
PRIOR APPLICATION NUMBER: US 09/843,297
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR APPLICATION NUMBER: US 60/19,801
PRIOR PILING DATE: 2000-04-26
PRIOR APPLICATION NUMBER: US 09/861,801
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-04-26
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2000-05-19
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-05-19
PRIOR PILING DATE: 2001-05-19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 26
LENGTH: 665
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data
NUMBER OF SEQ ID NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TITLE OF INVENTION: NOVEL 25869, 25934, TITLE OF INVENTION: 38692, 46508, 1681: TITLE OF INVENTION: AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILE REFERENCE: MPI03-0180MNIM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FILING DATE: 2001-03-23
APPLICATION NUMBER: US 09/815,419
                                             614
                                                                                                554
                                                                                                                                             554
                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314
614
                                                                                                                                                                                             494
                                                                                                                                                                                                                                           494
                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    LHLEKPNEFVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                         TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                         TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                      TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                 SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
  HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                          HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                          TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                           SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                           TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sapiene
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            71.0%;
100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Score 472;
Pred. No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          removed -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       26335, 50365, 21117,
6, 16839, 49937, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   16;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gaps
                                                                                                                                                613
                                                                                                                                                                                                553
                                                                                                613
                                                                                                                                                                                                                                                                                                                                           493
                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                        433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      253
                                                                                                                                                                                                                                                                                           493
```

Ş 밁 S 밁 S 맑 Ś Ś

Ś 밁 S S

US-10-072-012-679

Sequence 679, Appropriation No.

Application US/10072012 o. US20040033493A1

```
밁
                                                                   Ś
                                                                                                        8
                                                                                                                                                                                                                                                    ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-072-012-679
                                                                                                                                                                                                                                                                                                                           SEQ ID NO 679
                                                                                                                                                                                                                  Query Match
                                                                                                                                                                               Matches 472;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,102
                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 1391
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: 60/267,459 PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT
                                                                                                                                                                                                                                                                                                          LENGTH: 690
                                                                                                                                                                                                Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICATION NUMBER: 60/265,514
FILLING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,517
FILLING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,395
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICATION NUMBER: 60/265,412 FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICATION NUMBER: 60/266,767 FILING DATE: 2001-02-05
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICATION NUMBER: 60/266,406 FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               FILING DATE:
                                   279
                                                                      254
                                                                                                          219
                                                                                                                            194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  INFORMATION:
314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                     IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                          TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Tchernev, Velizar
Spytek, Kimberly
                                 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Padigaru, Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Taupier Jr, Raymond J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Miller, Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Anderson, David W.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Zerhusen, Bryan
                                                                                                                                                                               Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        c, Adam R.
Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Steven D.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Velizar
                                                                                                                                                                                                100.0%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Luca
                                                                                                                                                                                                                  71.0%;
                                                                                                                                                                                                 Score 472; ; Pred. No.
                                                                                                                                                                               <u>.</u>
                                                                                                                                                                             Mismatches
                                                                                                                                                                                                 0
                                                                                                                                                                                                                  DB 15;
                                                                                                                                                                               0;
                                                                                                                                                                                                                  Length 690;
                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Same
                                                                                                                                                                               0;
                                                                                                                                                                             Gaps
                                                                     313
 373
                                                                                                        278
                                                                                                                                             253
                                                                                                                                                                               0
```

```
RESULT 15
US-10-072-012-703
                                                                                     á
                                                                                                                      밁
                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                 Ś
                                                                                                                                                                                맑
                                                                                                                                                                                                                                                                    8
                                                                                                                        579
                                                                                                                                                                                519
                                                                                                                                                                                                              494
                                                                                                                                                                                                                                           459
                                                                                                                                                                                                                                                                                                     399
                                                                                                                                                                                                                                                                                                                                 374
                                                                                                                                                                                                                                                                                                                                                               339
                                                            639
                                                                                       614
                                                                                                                                                    554
                                                                                                                                                                                                                                                                        434
                                                                                                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                           TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                        SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                             LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                         HEESPFEKOFKRRSCOMEFGESIMSENRSREELGKVGSOSSFSGSMEIIEVS
                                                                                                                                                  TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                          TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                    SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                      TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                          665
                                                              690
                                                                                                                                                                                                                                                                         493
                                                                                                                         638
                                                                                                                                                                                                               553
                                                                                                                                                                                                                                                                                                       458
                                                                                                                                                                                                                                                                                                                                    433
                                                                                                                                                     613
                                                                                                                                                                                   578
                                                                                                                                                                                                                                             518
                                                                                                                                                                                                                                                                                                                                                                  398
```

```
APPLICANT: Burgess, Catherine E.
ITITLE OF INVENTION: Proteins and Nucleic Acids Encoding San
FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GENERAL INFO
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Sequence 703, Appublication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                   APPLICATION NUMBER: 60/266,767
FILING DATE: 2001-02-05
                                                                                                                       APPLICATION NUMBER: 60/266,406 FILING DATE: 2001-02-02
                    APPLICATION NUMBER: 60/267,057 FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Tchernev, Velizar
Spytek, Kimberly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lepley, Denise M.
Rieger, Daniel K.
Burgess, Catherine E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Furtak, Katarzyna
Grosse, William M.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Anderson, David W. Rastelli, Luca
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alsobrook II, John P
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Miller,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Padigaru,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Gangolli, Esha
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Shimkets, Richard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Zerhusen, Bryan
Patturajan, Mee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Application US/10072012
D. US20040033493A1
NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Charles E.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Muralidhara
```

```
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
APPLICANT: Kovalic, David K.
APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILLE REFERENCE: 38-21(53313)B
CURRENT APPLICATION UNUBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
INUMBER OF SEQ ID NOS: 73128
SEQ ID NO 54204
LENGTH: 690
TYDE: DRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
Remaining Prior Application data removed - Se
NUMBER OF SEQ ID NOS: 1391
SOPTWARE: Patentin Ver. 2.1
SEQ ID NO 703
LENGTH: 690
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                          RESULT 16
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş

/ OTHER INFORMATION: Clone
US-10-425-114-54204
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local S
Matches 472
                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                        Sequence 54204, Application US/10425114 Publication No. US20040034888A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Homo sapiens -10-072-012-703
                             TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              y Match 71.0%; So
Local Similarity 100.0%; I
hes 472; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        IAIAYIMKRMDMSLDBAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    IAIAY IMKRMDMSLDEAYRFVKEKRPTIS PNFNFLGQLL DYEKKI KNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                ij.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Score 472; DB 15; Pred. No. 0; O; Mismatches 0;
             LIB4119-028-H6_FLI.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length 690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           278
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       313
                                                                                                                                                                                                              With
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
```

```
RESULT 17
US-10-072-012-256
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                             ; Sequence 256, Applicat
publication No. US200
GENERAL INFORMATION:
APPLICANT: TChernev,
APPLICANT: Spytek, I
APPLICANT: Zerhusen,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity
Matches 472; Conserv
                                                                                                                                                                                                                                                    APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                           APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            579
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       554
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        399
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                494
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   194
                                                                                                                                               Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
Taupier Jr, Raymond J.
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          HEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                          Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                    Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                      Gangolli, Esha
                                                                                                                                                                                                                                                                                  Patturajan, Meera
Shimkets, Richard
                                                                                                                                                                                                                                                                                                                Spytek, Kimberly
Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                           Application US/10072012
o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              71.0%; Score 472; Dilarity 100.0%; Pred. No. 0; Conservative 0; Mismatches
                                                                                                                                                                                                                                                                                                                                              Velizar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            15;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              690;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            338
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            638
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      578
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  553
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               518
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      278
```

FILE REFERENCE: 21402-258
CURRENT APPLICATION NUMBER: US/10/072,
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514

Encoding

```
RESULT 18
US-10-072-012-258
                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                5
                                                                                                                                                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-072-012-256
                                                                                                                   Sequence 258, Application No. US20 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEQ ID NOS: 1391
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 256
                                                                             APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Matches 394;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
                                                    APPLICANT:
             APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRIOR PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
PRIOR FILING DATE: 2001-02-08
                                         APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ENGTH: 680
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DR APPLICATION NUMBER: 60/266,406
RFILING DATE: 2001-02-02
DR APPLICATION NUMBER: 60/266,767
DR FILING DATE: 2001-02-05
DR APPLICATION NUMBER: 60/267,057
DR APPLICATION NUMBER: 60/267,057
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,395
FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,517
FILING DATE: 2001-01-31
APPLICATION NUMBER: 60/265,412
                                                                                                                                                                                                                                       632
                                                                                                                                                                                                                                                                   587
                                                                                                                                                                                                                                                                                           572
                                                                                                                                                                                                                                                                                                                      527
                                                                                                                                                                                                                                                                                                                                              512
                                                                                                                                                                                                                                                                                                                                                                          467
                                                                                                                                                                                                                                                                                                                                                                                                   452
                                                                                                                                                                                                                                                                                                                                                                                                                             407
                                                                                                                                                                                                                                                                                                                                                                                                                                                       392
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          332
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    287
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  272 RFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQ
                                                                                                                                                                                                                647
                                                                             Tchernev, Velizar
Spytek, Kimberly
Zerhusen, Bryan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       KSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLEDSPLVQALSGLHLSADRLE
                                                                                                                                                                                                                               FGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                                IYGGSASYSAYSCSQLFTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQME
                                                                                                                                                                                                                                                                                                                       NYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASA
                                                                                                                                                                                                                                                                                                                                        NYHTSFLFGLSTSQQHLTKSAGLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASA
                                                                                                                                                                                                                                                                                                                                                                          SEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVED
                                                                                                                                                                                                                                                                                                                                                                                           SEQTPETSPDKEEASIPKKLQTARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVED
                                                                                                                                                                                                                                                                                                                                                                                                                              DSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQEL
                                                                                                                                                                                                                                                                                                                                                                                                                                              DSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQEL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 KSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLEDSPLVQALSGLHLSADRLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKLLHLEKPNEPVPAVSEGGQ
                                                                                                                                                                                                              FGESIMSENRSREELGKVGSQSSFSGSMEIIEVS
                                                                                                                                                                                                                                                                   IYGGSASYSAYSCSQLPTCGDQVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQME
Gangolli,
Padigaru,
Anderson,
                                                  Patturajan, Meera
Shimkets, Richard
                                         Li, Li
                                                                                                                                             Application US/10072012
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
                                                                                                                                 US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               59.2%; Succession 100.0%; Pred. No. 100.0%; Pred. No. 100.0%; Mismatches
                                                                                                          Velizar
                          Esha
  David W.
               Muralidhara
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  DB 15;
                                                                                                                                                                                                                                          665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length 680;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ٥,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                571
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    346
                                                                                                                                                                                                                                                                                                                                                                                                                                466
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          391
                                                                                                                                                                                                                                                                                              631
                                                                                                                                                                                                                                                                                                                       586
                                                                                                                                                                                                                                                                                                                                                                                                    511
                                                                                                                                                                                                                                                                                                                                                                                                                                                         451
                                                                                                                                                                                                                                                                    646
                                                                                                                                                                                                                                                                                                                                                                           526
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       0
                                          밁
                                                                8
                                                                                             밁
                                                                                                                                                밁
                                                                                                                                                                         á
                                                                                                                                                                                                     밁
                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                      맑
                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens US-10-072-012-258
                                                                                                                     8
                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                   SOFTWARE: Pat
SEQ ID NO 258
LENGTH: 662
                                                                                                                                                                                                                                                                                                                      Query Match
Best Local 9
                                                                                                                                                                                                                                                                                                            Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                           Local Similarity
                                          599
                                                                   602
                                                                                             539
                                                                                                                       542
                                                                                                                                                                            482
                662
                                                                                                                                                  479
                                                                                                                                                                                                     419
                                                                                                                                                                                                                               422
                                                                                                                                                                                                                                                         359
                                                                                                                                                                                                                                                                                  362
                                                                                                                                                                                                                                                                                                                                                                                                                                Patentin Ver.
               IEVS
                 665
```

```
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgess, Catherine E.
TITLE OF INVENTION: Proteins and Nucleic Acids Enc
FILE REFERENCE: 21402-258
CURRENT FILING DATE: 2002-01-31
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,510
PRIOR FILING DATE: 2001-01-31
PRIOR PPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,517
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR PILING DATE: 2001-01-31
PRIOR PPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR APPLICATION NUMBER: 60/265,406
PRIOR APPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-05
PRIOR PPLICATION NUMBER: 60/266,767
PRIOR PILING DATE: 2001-02-07
PRIOR PPLICATION NUMBER: 60/266,975
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PRIOR APPLICATION NUMBER: 60/266,975
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
PRIOR PILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Remaining Prior Application data removed - NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                         SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFS
                                 KPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEI
                                                                                                                                                   DILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQ
                                                                                                                                                                                                                                                                    KRLHSVRTSSSGTAQRS1LSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SVPSVQPSLLEDSPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFS
                                                                                                                    DILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGDQVYSVRRRQ
                                                                                                                                                                                                                                   KRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSAGLGLKGWHS
                                                                                                                                                                                                                                                                                                                                                       SSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQTARPSDSQS
KPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQSSFSGSMEI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gerlach, Valerie
Taupier Jr, Raymond
Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Colman, Steven D. Wolenc, Adam R. Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lepley, Denise M.
Rieger, Daniel K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Rastelli,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          45.7%; So ilarity 100.0%; I Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Charles
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Score 304; DB 15; I
; Pred. No. 1.4e-278;
0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ۲.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Encoding
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 662;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                661
         658
                                                                                                                          598
                                                                                                                                                                              601
                                                                                                                                                                                                                                            538
                                                                                                                                                                                                                                                                                                   541
                                                                                                                                                                                                                                                                                                                                                             478
                                                                                                                                                                                                                                                                                                                                                                                                                        481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               418
```

밁

659

EVS

```
RESULT 20
US-10-108-260A-4872
                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    გ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RESULT 19
US-10-296-115-1259
                                                                                                                          FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 4872
                                                                                                                                                                                                                                     Sequence 4872, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INFORMATION: No. US20040005560A1e1 full length cDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 100.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR FILING DATE: 2000-04-25
NUMBER OF SEQ ID NOS: 1478
SEQ ID NO 1259
LENGTH: 672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 1259, Application US/10296115
Publication No. US20040053248A1
GENERAL INFORMATION:
APPLICANT: Hyseq Inc
TITLE OF INVENTION: No. US20040053248A1el Nucleic Acids and Polypeptides
Query Match
Best Local Similarity
                                                         -10-108-260A-4872
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Homo sapiens
PEATURE:
NAME/KEY: misc_feature
LOCATION: (1)...(672)
OTHER INFORMATION: Xaa = a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PILE REFERENCE: 784PCT
CURRENT APPLICATION NUMBER: US/10/296,115
CURRENT FILING DATE: 2002-11-18
PRIOR APPLICATION NUMBER: US09/488,725
PRIOR PILING DATE: 2000-01-21
PRIOR APPLICATION NUMBER: US09/552,317
                                                                      TYPE: PRT
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
                                                                                                              ENGTH: 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 381
                                                                                                                                                                                                                                                                                                                                                                                                           441
                                                                                                                                                                                                                                                                                                                                                                                                                                           434
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            321
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        314 LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSBAAGQRPVHPASVPSVPSVQPSLLED 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  261
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         201
                                                                                                                                                                                                                                                                                                                                                                                                                              TTLDGTNKLCQFSPVQEL 451
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPLVQALSGLHLSADRLEDSNKLKRSFSLDIKSVSYSASMAASLHGFSSSEDALEYYKPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LHLEKPNEPVPAVSEGGQKSETPLSPPCADSATSEAAGQRPVHPASVPSVPSVQPSLLED
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQTGASGPKSKLKL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                         TTLDGTNKLCQFSPVQEL 458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               38.8%;
 22.9%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       any amino acid or other as shown
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score 258; DB 15;
Pred. No. 5e-235;
0; Mismatches 0;
Score 152; DB 15;
Pred. No. 4.6e-135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              <u>.</u>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length
               Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ä
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Table
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
```

APPLICANT:

Shimkets, Richard Patturajan,

Meera

APPLICANT: APPLICANT:

Spytek, Kimberly Zerhusen, Bryan

APPLICANT:

APPLICANT: APPLICANT:

Gangolli, Esha Padigaru, Muralidhara Anderson, David W. Anstelli, Luca

Gerlach, Valerie Taupier Jr, Raymond J.

Miller, Charles E.

```
; LENGTH: 155
; TYPE: PRT
; ORGANISM: Homo s
US-09-964-277-7
                                                                                                                                            먉
                                                                                                                                                                         Ś
                                                                                                                                                                                                           B
                                                                     RESULT 22
US-10-072-012-682
                                                                                                                                                                                                                                            Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-09-964-277-7
APPLICANT: Tchernev, Velizar
                                  Sequence 682, Application US/10072012 Publication No. US20040033493A1
                                                                                                                                                                                                                                                                                Query Match 16.2%; So
Best Local Similarity 100.0%; I
Matches 108; Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                          SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 7, Application US/09964277 Patent No. US20020137170A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                           CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OP INVENTION: DSP-16 DUAL-SPECIFICITY PHOSPHATASE
FILE REFERENCE: 200125.434
                                                                                                                                                                254 IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQ 301
                                                                                                                                                                                                                                   194 TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              653
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    533
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           473
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  413 MAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQ 472
                                                                                                                                                                                                             48
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 252;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ۲
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSTSQQHLTKSA 532
                                                                                                                                          IAIAYIMKRMDMSLDEAYRFVKEKRPTISPNFNFLGQLLDYEKKIKNQ 155
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGD
                                                                                                                                                                                                               TCPKPDFIPESHFLRVPVNDSFCEKILPWLDKSVDFIEKAKASNGCVLVHCLAGISRSAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SSFSGSMEIIEVS 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSFSGSMEILEVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                QVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQ 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    QVYSVRRRQKPSDRADSRRSWHEESPFEKQFKRRSCQMEFGESIMSENRSREELGKVGSQ 652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GLGLKGWHSDILAPQTSTPSLTSSWYFATESSHFYSASAIYGGSASYSAYSCSQLPTCGD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TARPSDSQSKRLHSVRTSSSGTAQRSLLSPLHRSGSVEDNYHTSFLFGLSISQQHLTKSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            MAASLHGFSSSEDALEYYKPSTTLDGTNKLCQFSPVQELSEQTPETSPDKEEASIPKKLQ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Conservative
                                                                                                                                                                                                                                                                                                                                                                        sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              665
                                                                                                                                                                                                                                                                                  Score 108; DB 9; ]; Pred. No. 1.3e-93; 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ۲,
                                                                                                                                                                                                                                                                                                                     Length 155
                                                                                                                                                                                                                                                                                  Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Indels
                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
                                                                                                                                                                                                                                                                                  Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                               107
                                                                                                                                                                                                                                                 253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    592
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              6
                                                                                                                                                                                                                                                                                  0
```

```
US-10-072-012-683
                                                                                                                                                                                                                                                                                                                                               RESULT 23
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Mus musculus US-10-072-012-682
                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: Tchernev, Velizar
APPLICANT: Spytek, Kimberly
                                                                                                                                                                                                                                                                                  Sequence 683, A Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity
Matches 67; Conserv
                                                                                                   APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: Pa
                                                                                                                                             APPLICANT:
                                                                                                                                                                APPLICANT:
                                                                                                                                                                                     APPLICANT:
                                                                 APPLICANT:
                                                                                    APPLICANT
                                                                                                                                                                                                        APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/266,975
PRIOR FILING DATE: 2001-02-07
PRIOR APPLICATION NUMBER: 60/267,459
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 66
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/265,517
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR FILING DATE: 2001-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/265,514
PRIOR FILING DATE: 2001-01-31
PRIOR APPLICATION TUMBER: 60/265,514
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Pena, Carol E. A
APPLICANT: Furtak, Katarzyna
APPLICANT: Grosse, William M.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Rieger, Daniel K.
APPLICANT: Burgees, Catherine B.
TITLE OF INVENTION: Proteins and Nucleic Acids Encoding Same
FILE REFERENCE: 21402-258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICATION NUMBER: 60/266,406
FILLING DATE: 2001-02-02
APPLICATION NUMBER: 60/266,767
FILLING DATE: 2001-02-05
                                                                                                                                                                                                                                                                                                                                                                                                    75 HKVDIDC 81
                                                                                                                                                                                                                                                                                                                                                                                                                                      75 нкурірс ві
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   15
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           15 LVALLESGTEKVLLIDSRPFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    660
                Gangolli, Esha
Padigaru, Muralidhara
Anderson, David W.
Rastelli, Luca
Miller, Charles E.
Gerlach, Valerie
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PatentIn Ver.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LVALLESGTEKVILLIDSRÞFVEYNTSHILEAININCSKLMKRRLQQDKVLITELIQHSAK 74
                                                                                                                                                          Shimkets, Richard
                                                                                                                                                                             Zerhusen, Bryan
Patturajan, Meer
                                                                                                                                                                                                                                                                            Application US/10072012
o. US20040033493A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wolenc, Auam
Pena, Carol E. A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ilarity 100.0%; F
Conservative 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Steven D.
Adam R.
                                                                                                                                                                               Meera
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  10.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Score 67; DB 15; ; Pred. No. 3.2e-54;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length 660;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0,
                                                                                                                                                                                                                                                                          RESULT 24
US-09-764-853-578
                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                       Patent No. US20020090672A1

GENERAL INFORMATION:
APPLICANT: Rosen et al.
TITLE OF INVENTION: Nucleic Acids, Proteins,
FILE REFERENCE: DVZO6
CURRENT APPLICATION NUMBER: US/09/764,853
CURRENT FILING DATE: 2001-01-17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-072-012-683
Prior application data removed -
NUMBER OF SEQ ID NOS: 939
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 578
LENGTH: 88
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER: Pater
SOFTWARE: Pater
; SEQ ID NO 683
FRIGTH: 677
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/10/072,012
CURRENT FILING DATE: 2002-01-31
PRIOR APPLICATION NUMBER: 60/265,102
PRIOR FILING DATE: 2001-01-30
PRIOR PRILING DATE: 2001-01-31
PRIOR PRILING DATE: 2001-01-31
PRIOR PRILING DATE: 2001-01-31
PRIOR PRILING DATE: 2001-01-31
PRIOR PRILING DATE: 2001-01-31
PRIOR PRILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,412
PRIOR PRILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/265,395
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR PILING DATE: 2001-01-31
PRIOR APPLICATION NUMBER: 60/266,406
PRIOR FILING DATE: 2001-02-02
PRIOR FILING DATE: 2001-02-02
PRIOR FILING DATE: 2001-02-02
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Matches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Query Match
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Leple
APPLICANT: Riege
APPLICANT: Burge
TITLE OF INVENTIC
FILE REFERENCE: 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PRIOR APPLICATION NUMBER: 60/266,767
PRIOR FILING DATE: 2001-02-05
PRIOR APPLICATION NUMBER: 60/267,057
PRIOR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ORGANISM: Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 6
TYPE: PRT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           PRIOR APPLICATION NUMBER: 60/267,459 PRIOR FILING DATE: 2001-02-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PRIOR FILING DATE: 2001-02-07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PRIOR APPLICATION NUMBER: 60/266,975
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Local
                                                                                                                                                                                                                                                                                                                                                                                                                              114 SFNSVHLLAGGFÁBFSRCFÞGLCEGKSTLVÞTCISQÞCLÞVANIGÞTRILÞNLYLGCQRD 173
                                                                                                                                                                                                                                                                                                                                                            174 VLNK 177
                                                                                                                                                                                                                                                                                                                                                                                                174 VLNK 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                     114 SFNSVHLLAGGFAEFSRCFPGLCEGKSTLVPTCISQPCLPVANIGPTRILPNLYLGCQRD 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            INVENTION: Proteins and Nucleic Acids Encoding Same
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Furtak, Katarzyna
Grosse, William M.
Alsobrook II, John P.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Lepley, Denise M.
Rieger, Daniel K.
Burgess, Catherine E
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          9.6%; Score 64; DB 15; 1 larity 100.0%; Pred. No. 2.2e-51; Conservative 0; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Wolenc, Adam R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Taupier Jr, Raymond Gusev, Vladimir Y.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      musculus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Carol E. A
                                                                                          consult PALM or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ۲.
                                                                                                                                                                      and Antibodies
                                                                                      file wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length 677;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
```

0,

0

밁 Ş 밁 Ś

Search completed: February 9, 2005, 12:40:27 Job time : 138 secs 밁 ; ORGANISM: Homo sapiens US-09-764-853-578 Query Match 8.4%; Score 56; DB 9; Length 88; Best Local Similarity 100.0%; Pred. No. 1.4e-44; Matches 56; Conservative 0; Mismatches 0; Indels 0; Gaps 0,

This Page Blank (uspto)

```
Minimum DB
Maximum DB
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Title:
Perfect score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -MODEL=frame+ p2n.model -DEV=xlp
-Q=/cgn2 1/USPTO spool p/US10029345/runat 09022005 091324 26455/app query.fasta_1.839
-Q=/cgn2 1/USPTO spool p/US10029345/runat 09022005 091324 26455/app query.fasta_1.839
-DB=PublIshed_Applications NA -QFMT=fastap -SUPFIX=olip2n.rnpb -MINMATCH=0.1
-LOOPEL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MAXTRIX=oligo
-TRANS=human40.cdi -LIST=1000 -DOCALIGN=200 -THR SCORE=quality -THR MIN=75
-ALIGN=50 -MODE=LOCAL -OUTEMT=pto -NORM=ext -HBAPSIZE=500 -MINLEN=0
-MAXLEN=2000000000 -USER=US10029345 @CGN 1 1 723 @runat 09022005 091324 26455
-NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100
-LONGLOG -DEV_TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=60 -XGAPEXT=60
-FGAPEXT=7 -YGAPOP=60 -YGAPEXT=60 -DELDY=6 -DELEXT=7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Searched:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OM protein - nucleic search, using frame_plus_p2n model
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Database :
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Post-processing: Listing first 1000 summaries
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Word size:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scoring table:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               seq length: 0
seq length: 2000000000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Xgapop 60.0 , Y
Ygapop 60.0 , Y
Fgapop 6.0 , F
Delop 6.0 , I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pebruary 14, 2005, 13:42:21 ; Search time 845 Seconds (without alignments) 4643.557 Million cell updates/sec
                 222111111111110007
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    OLIGO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Published_Applications_NA: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5378673 seqs, 2950229984 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MAHEMIGTQIVTERLVALLE.....LGKVGSQSSFSGSMEIIEVS 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Copyright
/ Cgn2_6/ptodata/2/pubpna/US07_NEW PUB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US10A_PUBCOMB.seq: *
/ Cgn2_6/ptodata/2/pubpna/US10B_PUBCOMB.seq: *
                                                                                                                                                                                                                                                                                                                                                                                                                                                           /cgn2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /cgn2_6/ptodata/2/pubpna/US07_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/PCT_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
/cgn2_6/ptodata/2/pubpna/US07_NEW_PUB.seq:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GenCore version 5.1.6 (c) 1993 - 2005 Compugen Ltd.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Xgapext
Ygapext
Fgapext
Delext
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60.0
60.0
7.0
7.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         39
```

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Alignment Scor Pred. No.: Score: Percent Simila Best Local Sim	RESULT 1 US-09-816-494-3 Sequence 3, Applicati, Patent No. US20020034 GENERAL INFORMATION: APPLICANT: Meyers, R TITLE OF INVENTION: TITLE OF INVENTION: CURRENT APPLICATION NO. FILE REFERENCE: 1044 CURRENT FILLING DATE: PRIOR APPLICATION NU. PRIOR FILLING DATE: PRIOR		NO. Score 1 472 2 4772 3 4772 6 4772 113 4772 114 4772 115 4472 116 4772 117 4472 118 4472 119 4472 120 4472 221 4772 221 4772 223 4472 224 4772 236 4772 237 4772 238 4772 239 4772 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 4372 231 331 3304 232 331 3304 233 331 3331 233 331 3304 233 331 3304 233 331 331 331	r
Scores: : imilarity: I Similarity:	16-494-3 16-494-3 10-494-3 10-20-20-34807A1 AL INFORMATION: ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: Meyers, Rachel A. ICANT: DATE: 10448-03002 ICANT: APPLICATION NUMBER: US/00:03-23 ICANT: FILING DATE: 2000-03-24 ICANT: Meyers, Rachel A. ICANT: Meyers, R		Mat ch	
0 472.00 99.40% 99.40%	on US/ 807A1 807A1 3AChel 3HOSP 9HOSP 8-0300 WHOBER 2000-03 : 10 CWINDER:		Length DB 1998 1 1998 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 20102 1 1998 1 19	ı
		Ą	ID	
Length: Matches: Conservative: Mismatches:	MOLECULES AND USES)/816,494 91,858 :Bion 4.0	ALIGNMENTS	09-816-494-3 -10-377-072-27 -10-94-749-673 -10-168-506-2 -10-257-026-1 09-964-277-20 09-964-277-20 09-964-277-20 10-370-7158-261 09-816-494-1 -10-377-072-25 -10-425-114-26234 -10-377-072-25 -10-377-072-25 -10-377-072-25 -10-357-930-20024 -10-357-930-21003 -10-357-930-31009 -10-357-930-100808 -10-357-930-100808 -10-357-930-100808 -10-357-930-100808 -10-357-930-100808	
1998 663 0	S THEREFOR		Sequence seq	•

US-10-377-072-27 US-10-377-072-27, Application US/10377072 ; Sequence 27, Application US/10377072 ; Publication No. US20040009501A1 ; GENERAL INFORMATION:	320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340 	Qy da
AGGTCTCC 19	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320 	Qy Db
1919 ACAGGTCACGGGAAG	280 hrileSerProAgnPheAgnPheLeuGlyGlnLeuLeuAgpTyrGluLygLygIleLygA 300 	Qy Db
	260 etlysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280 	Qy da
620 191111	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260 	Qy Db
580 eralafyrsercysserginleuprofintcysgyaspulnyalfylogiyaspulny	59	da VQ
560 laThrGluSerSerHisbheTyrSerAlaSerHyr 1	00 helleDroGluSerHisDheLeuArgValDroValAsnAspSerPheCysGluLysIleL 22	B & 1
ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG	181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200	음 성
	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	Qy dd
1499 TATCTCCACTGCATCGAAGTGGGAGGGGAGGACAATTACCACACCAGCTTCCTTTTCG 1491 TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG 1490 TATCTCCACTGCATGGAAGTGGGAGGACAATTACCACACCAGCTTCCTTTTCG	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160	4d 40
1439 AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGTGGCACTGCCCCAGAGGTCCCTTT	121 LeualaglyGlyPhealaglupheSerArgCysPheProGlyLeuCysGluGlyLysSer 140	da VQ
1379 480	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	da Vo
1319	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100	dg VQ
1259	61 ASPLYSVALLeuIleThrGluLeuIleGlnHisSerAlaLySHisLySValAspIleAsp 80	da VQ
1199 TCTC	41 HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60 	4a V2
	21 SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40	Qy dd
360 a	1 MetAlaHisGluMetIleGlyThrGlnIleValThrG 	Qy da
ω—<	ry Match: 70.98% Indels: 4 9 Gaps: 0 10-029-345A-109 (1-665) x US-09-816-494-3 (1-1998)	Que Que

```
APPLICANT: KUGCIDI-OWEN, LBUTA A.
APPLICANT: TBai, Fong-Ying
APPLICANT: TBai, Fong-Ying
TITLE OF INVENTION: NOVEL 25869, 25934, 26335, 50365, 21117,
TITLE OF INVENTION: NOVEL 25869, 16816, 16839, 49937, 49931 AND 49933 MOLECULES
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180NNIM
CURRENT APPLICATION NUMBER: US 105/01/377,072
CURRENT FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/723,806
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 99/843,297
PRIOR APPLICATION NUMBER: US 60/197,455
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR APPLICATION NUMBER: US 99/861,801
PRIOR APPLICATION NUMBER: US 99/816,494
PRIOR APPLICATION NUMBER: US 99/815,419
PRIOR APPLICATION NUMBER: US 99/815,419
                                                                                                                                                                                                                                                                                                                                                                                                                             SOPTWARE: PASTSEQ for Wir

SEQ ID NO 27

LENGTH: 1998

TYPE: DNA

ORGANISM: Homo Sapiens

PEATURE:

PEATURE:

NAME/KEY: CDS

LOCATION: (1)...(1998)

US-10-377-072-27
                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                   Ś
                                                                                                                                                                                                        밁
                밁
                                         ঠ
                                                                             문
                                                                                                         ફ
                                                                                                                                          밁
                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                      US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                    Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT:
APPLICANT:
APPLICANT:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Millennium Pharmaceuticals APPLICANT: Curtis, Rory A.J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            FILING DATE: 2001-03-22
                181
                                                                            121
                                            61
                                                                                                           41
                                                                                                                                          13
                                                                                                                                                                       21
                                                                                                                                                                                                                                         ...
                                    AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                              H18IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                             SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                          MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                        ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Curtis, Rory A.J.
Logan, Thomas Joseph
Glucksmann, Maria A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Rudolph-Owen, Laura A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Meyers, Rachel E. Williamson, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application data removed - D NOS: 114
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                for Windows Version 4.0
                                                                                                                                                                                                                                                                                                      472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          See File Wrapper or PALM
                                                                                                                                                                                                                                                                                                      040
                                              80
                                                                                                           60
                                                                                                                                          120
                                                                                                                                                                                                        60
                                                                            180
                                                                                                                                                                          40
                                                                                                                                                                                                                                     20
                                                        δ
                       닭
                                                                                       В
                                                                                                                     Ś
                                                                                                                                                      В
                                                                                                                                                                                    Ś
                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                  유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                         1139
                                                                                                                                                                                                                                                                                     1019
                               1259
                                                                                              1199
                                                                                                                                                                                                                        1079
                                                             420
                                                                                                                          400
                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                   340
440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
                                                                                                                                                                                                                                                                                                                                                  959
                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                 899
                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        81
                                                                                                                                                                                                                                                                                                                                                                     snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                               heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                             heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                             euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                              alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                    CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCCGTGCATCCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                    snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                              TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                           TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                      TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTGAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                       roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                 ACCAGAC'I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                               1318
                                                                                                                                                         1198
                                                                                              1258
                                                                                                                             420
                                                                                                                                                                                         400
                                                                                                                                                                                                                        1138
                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                       1078
                                                                                                                                                                                                                                                                                                                                                  1018
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  180
                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                  340
                                                                                                                                                                                                                                                                                                                                                                                                                   958
                                                                                                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        656
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     598
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             360
```

S 뮰 Ś 밁 Ś 밁 5 밁

520

1499

500

1439

1379

1319

1559

```
APPLICANT: Glucksmann, Maria A.
APPLICANT: Meyers, Rachel E.
APPLICANT: Williamson, Maria A.
APPLICANT: Williamson, Mark J.
APPLICANT: Rudolph-Owen, Laura A.
APPLICANT: Chun, Miyoung
APPLICANT: Chun, Miyoung
ITILE OF INVENTION: MOVEL 25869, 25934, 26335, 5036;
TITLE OF INVENTION: 38692, 46508, 16816, 16839, 49;
TITLE OF INVENTION: AND USES THEREFOR
FILE REFERENCE: MPI03-0180MNM
FILE REFERENCE: MPI03-0180MNM
FULL REFERENCE: WDS-02-27
PRIOR APPLICATION NUMBER: US/10/377,072
PRIOR APPLICATION UNMER: US/8985,860
PRIOR FILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 60/215,370
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
PRIOR APPLICATION NUMBER: US 09/723,806
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAAAGCAGTTTAAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA 600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ccacadadrecticacaciretacretidecticadecaretacodadecadrecadrecadritaet 1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCGGATATCTTGGCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     isSerAspIleLeuAlaProGlnThrSerThrDroSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 GCCTTTCCACCAGCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rárcrccácrecárceaáereseas recereseas raceas receivas conservados receivados r
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                c rearna a de de conserva de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Inc.
                                                                                                                                                                                                                                                                                                                                                                                 , 50365, 21
39, 49937,
                                                                                                                                                                                                                                                                                                                                                                   21117,
7, 49931 AND 49933 MOLECULES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1558
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1498
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1438
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1378
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application data removed - Sel NUMBER OF SEQ ID NOS: 114

SOFTWARE: FastSEQ for Windows Version 4.0

ENOTH: 1998

TYPE: DNA

ORGANISM: Homo Sapiens
FAATURE:
NAME/KEY: CDS
LOCATION: (1)...(1998)

US-10-377-072-27
                                                                                                  뮍
                                                                                                                                                   5
                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109 (1-665) x US-10-377-072-27 (1-1998)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION NUMBER: US 60/187,455
PRIOR PILING DATE: 2000-03-07
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2001-04-25
PRIOR PILING DATE: 2000-04-26 (7199,801)
PRIOR PILING DATE: 2000-04-26 (7199,801)
PRIOR APPLICATION NUMBER: US 60/199,801
PRIOR PILING DATE: 2001-05-21
PRIOR PILING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 60/205,508
PRIOR PILING DATE: 2001-05-19
PRIOR APPLICATION NUMBER: US 09/816,494
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-23
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
PRIOR PILING DATE: 2001-03-27
                                                                                                  481
                                                                                                                                                                                                                                 421
                                                                                                                                                                                                                                                                                            141
                                                                                                                                                                                                                                                                                                                                                               361
                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    41 HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          L
-GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                 ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                        ThrieuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                      LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         See File Wrapper or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1998
663
0
2
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PALM
                                                                                                                                                                                                    480
                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           60
```

RESULT 3 US-10-377-072-27

Sequence 27, Application US/10377072 Publication No. US20040157221A9 GENERAL INFORMATION:

GENERAL INFORMATION:

APPLICANT: Millennium Pharmaceuticals
APPLICANT: Curtis, Rory A.J.

APPLICANT: Curtis, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Glucksmann, Maria A.

占 Ś 밁 Ś В Ś 밁 Ś 문 S 밁 Ś В Ş 뫄

1979

660

luIleIleGluValSer 665 AAATCATTGAGGTCTCC

1995

1919

640

1859

1799

1739

1679

560

580

1619

18SerAspIleLeualaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560	% <u>—</u> ∺	euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520	InSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500	roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480	snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460	heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440 	heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuH1sGlyP 420	euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400	alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380	roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360	snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340	snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320	hrīleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIlsLysA 300	etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280	alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260	euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240 	TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT 658
DB:	it Similarity: Local Similarity: Match:	US-10-094-749-673 Alignment Scores: Pred. No.: 0	,	LICATION N ING DATE: SEQ ID NO	CURRENT APPLICATION NUMBER; CURRENT FILING DATE: 2002 FRIOR APPLICATION NUMBER; PRIOR PEILNG DATE: 2002-01	AN		HIO, YIE OTSUKA		APPLICANT: ISOGAI, TAKAO APPLICANT: SUGIYAMA, TOMO APPLICANT: OTSUKI, TETSUJ APPLICANT: OTSUKI, TETSUJ	US-10-094-749-673 US-10-094-749-673 ; Sequence 673, Application t ; Publication No. US200302197 . GENERAL INFORMATION.	1979	"	1859	<u>.</u>		5 P

음성 음성

& 함

ち 음 ち

음성 음성

유 성

문

8 8 8 8 8 8

음 성 음 성

8 8 8 8 8 8

중 유

```
ISUTOMU
/TOYUKI
/TOYUKI
                                                                                                                                                                                                                                                                                                                                                                                                            UHIKO
TEL FULL-LENGTH CDNA
0160
0160
BER: US/10/094,749
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
1002-03-12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        N-ICHI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CHIRO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  MOYASU
UJI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1Ser 665
||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       US/10094749
)741A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  JGluLeuGlyLy8ValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              8 9 9 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG 1678
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TCC 1995
Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
         2102
662
0
6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1978
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1918
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1858
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1798
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      600
```

399 1252

459

479

```
В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          음 성
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Sn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        -10-029-345A-109 (1-665)
                                                                          1013
                                                340
                                                                                                   320
                                                                                                                             953
                                                                                                                                                   300
                                                                                                                                                                              893
                                                                                                                                                                                                      280
                                                                                                                                                                                                                                 833
                                                                                                                                                                                                                                                       260
                                                                                                                                                                                                                                                                                 773
                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                   713
                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                       653
                                                                                                                                                                                                                                                                                                                                                                                                              200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             476
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             416
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               356
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  296
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  236
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      176
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           41
           ProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             21
                                                             a Artida a certe recente recente de la certe del la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la certe de la ce
                                                                             AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                AACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGGAAGCCA
                                                                                                                              AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        56
                                                                                                                                                                  ACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAG
                                                                                                                                                                                 ThrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                     MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                     PheIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIle
                                                                                                                                                                                                                                                                                                                                                                                                                           rfrancecedadrerearricerdedrerecerdreaardaedecrifredadaaarr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CT-AATTĊTTĊCĊAATĊTTTATCTTGGĊTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Arg-IleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIl
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĠĀĊĪĠŦŦŤŦĊŦĊĀĊŦĠŦĀĊŦŤĊŦĠĠĠŦĀĀĀĊŦĠĠĀĠĀĠĀĠĊŦŦĊĀĀĊŦĊŦġŦŤĊĀĊĊŦġ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValH1sLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       HislleLeuGluAlaIleAsnIleAsnCysSexLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          x US-10-094-749-673 (1-2102)
             1132
                                      359
                                                             1072
                                                                                                                1012
                                                                                        339
                                                                                                                                                                   952
                                                                                                                                                                                                                     892
                                                                                                                                                                                                                                             279
                                                                                                                                                                                                                                                                      832
                                                                                                                                                                                                                                                                                              259
                                                                                                                                                                                                                                                                                                                                                 239
                                                                                                                                                                                                                                                                                                                                                                         712
                                                                                                                                                                                                                                                                                                                                                                                                                                                     199
                                                                                                                                                                                                                                                                                                                                                                                                   219
                                                                                                                                                                                                                                                                                                                                                                                                                              652
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              594
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              535
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  475
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    415
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          235
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
                                                                                  RESULT 5
US-10-168-506-2
                                                                                                                          뮍
                                                                                                                                          성 음 성
Sequence 2, Application US/10168506
Publication No. US20040053229A1
GENERAL INFORMATION:
APPLICANT: PLOWMAN, GREGORY D.
APPLICANT: MARTINEZ, RICARDO
APPLICANT: MHYTE, DAVID
                                                                                                                                                                                                                       음 성
                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                  뫄
                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ₽
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                          2033
                                                                                                                                                                          1973
                                                                                                                                                                                                                          1913
                                                                                                                                                                                                                                                                              1853
                                                                                                                                                                                                                                                                                                                                1793
                                                                                                                                                                                                640
                                                                                                                                                                                                                                                                                                                                                                                  1733
                                                                                                                                                                                                                                                                                                                                                                                                                                   1673
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1613
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1553
                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1493
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         400
                                                                                                                   GluIleIleGluValSer
||||||||||
GAAATCATTGAGGTCTCC
                                                                                                                                                                                                               AsnArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMet
                                                                                                                                                                                                                                                                   ĊĠĠĊŔĠŔŔĠĊĊŔŔĠŦĠŔĊŔĠŔĠĊŦĠŔĊŦĊĠĊĠĠĊĠĠŔĠĊŦĠĠĊŔŦĠŔŔĠŔĠĸĠĸĊĊĊĊŦŦŦ
                                                                                                                                                                                                                                                                                                                    SerAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArg
                                                                                                                                                                                                                                                                                                                                                                     ArgGlnLysProSerAspArgAlaAspSerArgArgSerTrpH1sGluGluSerProPhe
                                                                                                                                                                                                                                                                                                                                                                                                                        CACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCCTGACCAGCAGCTGGTATTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                       HisSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerTserTrpTyrPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CAGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGCAGCCCCAGAGGTCCCCTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GlnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               cerearnadeadeadeceaecarececaadaaderecadaerecedadecerrendeaeae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ProAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PheSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGly 419
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      665
                                                                                                                                                                2032
                                                                                                                                                                                         659
                                                                                                                                                                                                                  1972
                                                                                                                                                                                                                                         639
                                                                                                                                                                                                                                                                   1912
                                                                                                                                                                                                                                                                                                                     1852
                                                                                                                                                                                                                                                                                              619
                                                                                                                                                                                                                                                                                                                                                                                                                         1732
                                                                                                                                                                                                                                                                                                                                               599
                                                                                                                                                                                                                                                                                                                                                                        1792
                                                                                                                                                                                                                                                                                                                                                                                                 579
                                                                                                                                                                                                                                                                                                                                                                                                                                                  559
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1672
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    539
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1612
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    519
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1492
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       499
```

Ś 밁 Ś 밁 S 밁 S 밁 Ş 뭐 Ś 밁 Ş 밁 Ś 뮍 Ś 뮍 S В S

```
APPLICANT: MANNING, GERANU
APPLICANT: SUDARSANAM, SUCHA
APPLICANT: HILL, RON
APPLICANT: FLANAGAN, PETER
ITILE OF INVENTION: MANMALIAN PROTEIN PHOSPHATASES
FILE REFERENCE: 038602/1351
CURRENT APPLICATION NUMBER: US/10/168,506
CURRENT FILING DATE: 2002-06-21
PRIOR APPLICATION NUMBER: PCT/US00/34736
PRIOR FILING DATE: 2000-12-21
NUMBER OF SEQ ID NOS: 76
SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 2
LENGTH: 2732
TYPE: DNA
ORGANISM: Homo sapiens
US-10-168-506-2
                                                                                                                                             닭
                                                                                                                                                                          S
                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                   В
                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                  ঠ
                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
    Ś
                                망
                                                        ક
                                                                                           밁
                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            뮹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-168-506-2 (1-2732)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          No.:
                                   1136
                                                                                                                                                   1018
                                                                                           1077
                                                                                                                      181
                                                                                                                                                                                161
                                                                                                                                                                                                            958
                                                                                                                                                                                                                                         141
                                                                                                                                                                                                                                                                      898
                                                                                                                                                                                                                                                                                                                              838
      220
                                                                                                                                                                                                                                                                                                 121
                                                                                                                                                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                                                                                                                                                        778
                                                                                                                                                                                                                                                                                                                                                                                                                                                  718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    598
                                                                                                                                                                                                                                                                                                                                                                                                                  81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          μ
                                                                                                                                                                                                                                                                                                                                                                                                         CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
    euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                    ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                     LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           H18IleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                           GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                   CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                          ACTOTAGTOCOTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                 TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                          -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                    CTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  040
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           7
                                                                                           1135
                                                                                                                                                                                                            1017
                                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                         160
                                                                                                                                                                                                                                                                      957
                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                        837
                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   657
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             597
                                                                                                                                                                                                                                                                                                                              897
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                40
                Ş
                                       밁
                                                                       Ś
                                                                                                                            Ś
                                                                                                                                                                                                                                             5
                                                                                                       문
                                                                                                                                                              片
                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                                                                                                                    片
                                                                                                                                                                                                                                                                                                                                                                                                                              á
                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1796
                                                                                                                                                                 2096
                                                                                                                                                                                                                         2036
                                                                                                                                                                                                                                                                                  1976
                                                                                                                                                                                                                                                                                                                                            1916
                                                                                                                                                                                                                                                                                                                                                                                                      1856
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1736
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1616
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1496
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1436
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1196 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1256 TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                    540
                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                             480
                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                 laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                            euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                         ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                            lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                           TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                 InSerLysArgLeuHisSerValArgThrSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                            CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCCAGACTGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                           roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                      ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                     snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  roCygAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                   600
                                               2275
                                                                             580
                                                                                                         2215
                                                                                                                                                                 2155
                                                                                                                                                                                              540
                                                                                                                                                                                                                         2095
                                                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                   2035
                                                                                                                                                                                                                                                                                                                                                                                                      1915
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1855
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1435
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1375
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1315
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1255
                                                                                                                                                                                                                                                                                                               500
                                                                                                                                                                                                                                                                                                                                            1975
                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1555
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1495
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              260
```

76 LysValAspIleAspCysSerGlnLysValValTyrAspGlnSerSerGlnAspVal 95		Score: 472.00 Matches: 248 Percent Similarity: 99.39% Conservative: 0 Best Local Similarity: 99.39% Mismatches: 2 Query Match: 70.98% Indels: 4 DB: 17 Gaps: 0 US-10-029-345A-109 (1-665) x US-10-296-115-520 (1-2966) Oy 16 ValAlaLeuLeuGluSerGlyThrGluLysValLeuLeuIleAspSerArgProPheVal 35 Db 68 Green Construction [RESULT 6 US-10-296-115-520 US-10-296-115-520 ; Sequence 520, Application US/10296115 ; Publication No. US20040053248A1 ; GENERAL INFORMATION: ; APPLICANT: Hyesq Inc TITLE OF INVENTION: No. US20040053248A1el Nucleic Acids and Polypeptides ; FILE REFERENCE: 794.PCT ; CURRENT APPLICATION NUMBER: US/10/296,115 ; CURRENT FILING DATE: 2002-11-18 ; PRIOR APPLICATION NUMBER: US09/488,725 ; PRIOR APPLICATION NUMBER: US09/488,725 ; PRIOR APPLICATION NUMBER: US09/552,317 ; PRIOR FILING DATE: 2000-01-21 ; PRIOR FILING DATE: 2000-01-21 ; PRIOR FILING DATE: 2000-01-21 ; PRIOR FILING DATE: 2010-044-25 ; NUMBER OF SEO ID NOS. 1478 ; NUMBER OF SEO ID NOS. 1478	Db 2276 CTGCCTACAGCTGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC 2335 Qy 600 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheg 620
\$ \$ \$ \$ \$ \$	7 Q B Q 6	5	D Q D Q D	26 66 66 66 66 66 66 66 66 66 66 66 66 6	8 B 8 B 8 B 8 B 8
435 hrLeuAspGlyThrAsnLysLeuCysGlnPheSerProValglnGluLeuSerGluGlnT 455	, , , , , , , , , , , , , , , , , , , 	5 hrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProV	275 ysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrg 295		

US-10-029-345A-109 (1-665) x US-10-257-026-1 (1-3059) Qy	t Local Similarity: 99.40% Mismatches: ry Match: 70.98% Indels: 17 Gaps:	t Scores: 0 Length: 472.00 Matches: Similarity: 99.40% Conservative:	; NAME/KBY: CDS ; LOCATION: (127)(2121) US-10-257-026-1	TYPE: DNA ORGANISM: FEATURE:	NUMBER OF SEQ ID NOS: SOFTWARE: PatentIn Ver SEQ ID NO 1 LENGTH. 3059	; TITLE OF INVENTION: New dual specificity phosphatase ; FILE REFERENCE: DUSPIOKOWS ; CURRENT APPLICATION NUMBER: US/10/257,026 ; CURRENT FILING DATE: 2003-11-07	US-10-25/026-1 Sequence 1, Application US/10257026 ; Publication No. US20040086859A1 ; GENERAL INFORMATION: ; ARRITORNE. MARKET GENERAL	1986 TT	655 heSerGlySerMetGluIleIleGluValSer 665	Qy 635 erIleMetSerGluAsnArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerP 655	1866 AAGAGAGCCCCTTTGAAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGA	Db 1806 ATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATG 1865	595 yrserVallargArgGlnLyBProSerABBArgGlnLyBProSerABBArgArgGlnLyBProSerABBArgArgGlnLyBProSerABBArgArgArgSerTrpHisG	Qy 575 lySerAlaSerTyrSerAlaTyrSerCysGerGlnLeuProThrCysGlyAspGlnValT 595	Qy 555 erSerTrpTyrPheAlaThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyG 575	1626 G	535 lyLeuLysGlyTrpHisSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrS	Qy 515 hrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuG 535	Cy 495 LaginargserLeuLeuSerProLeuH18ArgSerGlySerValGluAspAenTyrH18T 515	
. b Q	D 92 5	F & {	g Q	B 6	B &	D Q	D Q	B Q	D 4	S B	& £	5	р ў	<u> </u>	Q B	Q	B 5		Qy Db	: &
360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380 	roCygAlaAgpSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV	### ##################################	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320 	280 hrīleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300 	260 etlysärgmetäspmetserleuäspGluälaTyrärgPheVallysGluLysärgProt 280 	240 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260 	220 euProTrpLeuAspLysSerValAspPheileGluLysAlaLysAlaSerAsnGlyCysV 240 	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220	GCAGCAGAATGGGATTGGTTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT	607 CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 665	ArglieteuProAsnLeuTyrLeuGlyCysGlnArgAspValleuAsnLysGluLeuIle	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 	487 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTAAAGAAAAAAACC 546	GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG	367 TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCAAGATGTTGCCTCTCTCT	CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer	GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT	247 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 306	187 AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC 246 41 HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln 60	SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer

```
RESULT 8
US-09-964-277-20
Sequence 20, Application US/09964277
Sequence 20, Application US/09964277
Patent No. US20020137170A1
GENERAL INFORMATION:
APPLICANT: Luche, Ralf M.
APPLICANT: Wei, Bo
TITLE OF INVENTION: DSP-16 DUAL-SPECIFICITY PH(
FILE REFERENCE: 200125, 434
CURRENT APPLICATION NUMBER: US/09/964,277
CURRENT FILING DATE: 2001-09-25
NUMBER OF SEQ ID NOS: 22
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                  2045
                                                                                                                                                                                                                                                                          2105 AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                        1985
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1925
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1865
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1805
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1745
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1685
                                                                                                                                                                                                                                                                                                                  660
                                                                                                                                                                                                                                                                                                                                                                                      640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1565
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1445
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1385
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            440
                                                                                                                                                                                                                                                                                               luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                          snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                           GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        creccracaecrecaeciaeciaeciaecreceaecree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATCTCCACTGCATCGAAGTGGGAGCGTGGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snLysLeuCysGlnPheSerProValGlnGluLeuSarGluGlnThrProGluThrSerP 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2121
                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                                                                                                                               2044
                                                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1984
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1924
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1864
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1804
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1564
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1504
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1624
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1444
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1384
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    400
                                       문
           Ś
                                                                        Ş
                                                                                                                밁
                                                                                                                                            Ş
                                                                                                                                                                                      밁
                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Percent Similarity:
Best Local Similarit
Query Match:
DB:
                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; SEQ ID NO 20
; LENGTH: 3332
; TYPE: DNA
; ORGANISM: Homo &
US-09-964-277-20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         망
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                   1697
                                                                                                                                                                                      1637
                                                                                                                                                                                                                                                            1577
                                                                                                                                                                                                                                                                                                                                 1517
                                                                                                                                                                                                                                                                                                                                                                                                         1457
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1277
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1157
           474
                                                                                                                                                    434
                                                                                                                                                                                                                          414
                                                                                                                                                                                                                                                                                                                                                                     374
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1217
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1097
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1037
                                                                                                                                                                                                                                                                                                                                                                                                                                           354
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                334
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    314
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            294
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 274
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     254
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                214
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        194
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Similarity:
AlaArgProSerAspSerGlnSerLysArgLeuHisSerValArgThrSerSerSerGly
                                                          GlnThrProGluThrSerProAspLysGluGluAlaSerIleProLysLysLeuGlnThr
                                                                                                        AsnlysLeuLysArgSerPheSerLeuAspIleLysSerValSerTyrSerAlaSerMet 413
                                                                                                                                                                                                                                                                                                                                              SerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSer 393
                                                                                                                                                                                                                                                                                                                         AGCCCGCTGGTACAGGCGCTCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGG
                                                                                                                                                                                                                                                                                                                                                                                              cecerecareces en accerece en accerece en accerece en accerece en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en accereca en a
                                                                                                                                                                                                                                                                                                                                                                                                                    ProValHisProAlaSerValProSerValProSerValGlnProSerLeuLeuGluAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GluThrProLeuSerProProCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 LeuHisLeuGluLysProAsnGluProValProAlaValSerGluGlyGlyGlyGlnLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTGCACCTGGAGAAGCCAAATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATGAGAAGAAGATTAAGAACCAGACTGGAGCATCAGGGCCAAAGAGAGCAAAACTCAAGCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GTGAAAGAAAAAAGACCTACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VallysGluLysArgProThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TyrGluLysLysLieLysAsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeu 313
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATCGCTATCGCCTACATCATCAAGAGGATGGACATGTCTTTAGATGAAGCTTACAGATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                IleAlaIleAlaTyrIleMetLysArgMetAspMetSerLeuAspGluAlaTyrArgPhe
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LysAlaSerAsnGlyCysValLeuValHisCysLeuAlaGlyIleSerArgSerAlaThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     SerPheCysGluLysIleLeuProTrpLeuAspLysSerValAspPheIleGluLysAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAGCCTCCAATGGATGTGTTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AGCTTTTGTGAGAAATTTTTGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (1-665) x US-09-964-277-20 (1-3332)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
472.00
100.00%
100.00%
70.98%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     3332
472
0
0
 493
                                    1816
                                                                                                          1756
                                                                                                                                                                             1696
                                                                                                                                                                                                                                                     1636
                                                                                                                                            453
                                                                                                                                                                                                                 433
                                                                                                                                                                                                                                                                                                                         1576
                                                                                                                                                                                                                                                                                                                                                                                              1516
                                                                                                                                                                                                                                                                                                                                                                                                                                  373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1396
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      353
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1156
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1096
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1036
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       233
```

밁 5 뫄 δ 뮍 Ş 뭐 Ś 밁 S 밁 S 당 Ś 밁 S 뭥 δ 밁 δ 밁 Ś 뭐 á 닭 δ В Ś 밁 δ

ABPLYSVALLeullentleulleulleulleulleulleulleulleulleulleu
--

```
Sequence 261, Application US/10370715B
Sequence 261, Application US/10370715B
Publication No. US20040258678A1
SEMERAL INFORMATION:
Patin Docket Preview
APPLICANT: BODARY, SARAH C.
APPLICANT: BRISDELL, HUNTE
APPLICANT: SCHORMELL, HUNTE
APPLICANT: SCHORMELD, JILL R.
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WILLIAMS, P. MICKEY
APPLICANT: WOLD, WILLIAM I.
APPLICANT: WU, THOMAS D.
TITLE OF INVENTION: Compositions and Met
                                                                                                                                                       RESULT 10
US-10-370-715B-261
                                                                                                                                                                                          2540
                                                                                                                                                                                                                                     2480
                                                                                                                                                                                                                                                                                2420
                                                                                                                                                                                                                                                                                                                              2360
                                                                                                                                                                                                                                                                                                                                                                         2300
                                                                                                                                                                                                                                                                                                                                                                                                                     2240
                                                                                                                                                                                                                                                          640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1940
                                                                                                                                                                                                                                                                                                       620
                                                                                                                                                                                                                                                                                                                                                  600
                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1880
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   440
                                                                                                                                                                                                   luIleIleGluValSer
                                                                                                                                                                                      AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                           8nArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                         luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                    rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                              erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                         | laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                  CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                             ccacadadrecreacactreracredecreadecateracdadecadrecadridecadridec
                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     18SerAspI1eLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyp|
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                       2556
                                                                                                                                                                                                             665
    Methods
    for
  the
                                                                                                                                                                                                                              2539
                                                                                                                                                                                                                                                    660
                                                                                                                                                                                                                                                                          2479
                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                    2419
                                                                                                                                                                                                                                                                                                                                           620
                                                                                                                                                                                                                                                                                                                                                                  2359
                                                                                                                                                                                                                                                                                                                                                                                                              2299
                                                                                                                                                                                                                                                                                                                                                                                                                                                        2239
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       520
                                                                                                                                                                                                                                                                                                                                                                                       600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2119
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2059
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1939
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1879
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1819
                         Ś
                                                   밁
                                                                    5
                                                                                                뭐
                                                                                                               5
                                                                                                                                      밁
                                                                                                                                                              5
                                                                                                                                                                                          맑
                                                                                                                                                                                                          5
                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                            $
                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                      δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Pred.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    No.:
         1282
                                                   1222
                                                                                                1162
                                                                                                                                            1103
                                                                                                                                                                                          1044
                                                                                                                                                                   181
                                                                                                                        200
                                                                                                                                                                                                              161
                                                                                                                                                                                                                                     984
                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                 924
                                                                                                                                                                                                                                                                                                       121
                                                                                                                                                                                                                                                                                                                             864
                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                         804
                                                                                                                                                                                                                                                                                                                                                                                                                     744
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  684
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              624
                                                                                                                                                                                                                                                                                                                                                                                               81
                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21
```

맑 S 뮹 δ đ Ş 뮍 S 밁 S 밁 Ş 당 Ś 밁 Ś 밁 Ş 밁 Ş 밁 á 뮍 δ 밁 Ś 뮹 Ś

1221

220

1102

1043 160

140 983

120 923

863 100 803

743 60 683 40 623

```
; TITLE OF INVENTION: Related Diseases
; FILE REFERENCE: P1948R1-US
; CURRENT APPLICATION NUMBER: US/10/370,71:
; CURRENT FILING DATE: 2003-02-21
; NUMBER OF SEQ ID NOS: 742
; SEQ ID NO 261
; LENGTH: 3521
; TYPE: DNA
; ORGANISM: Homo sapien
US-10-370-7158-261
alLeuValHisCysLeuAlaGlyIleScrArgScrAlaThrIleAlaIleAlaTyrIleM
                                                       gcagcagaangggarnggranggranggrangggaa-raccigcaaagcaaagccigact
                                                                                                                           TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                     heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                         ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsn1leGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                           CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                               -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          (1-665) x US-10-370-715B-261 (1-3521)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3521
663
0
2
2
```

	LysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640	620 1
2 0	lnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG 620 	600 rgG 2362 GGC
ř.	llaTyrSerCy8SerGlnLeuProThrCy8GlyAspGlnValTyrSerValArgArgA 600 	580 erA 2302 CTG
5 -	ThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS 580 	560 la 2242 CC
Ę ·	SSETASPI1eLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560 	540 i 2182 A
5	YLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlYLeuGlYLeuLysGlYTrpH 540 	20 1
ŭ °	uSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 520 	500 e 2062 T
ř.	SerLysargLeuHisSerValargThrSerSerSerGlyThralaGlnArgSerLeuL 500 	480 ln 2002 AG
¥ -	OASPLYSGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 480 	460 r 1942 C
Ę ·	nnlysleuCysGlnpheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460 	440 s 1882 A
5	SerSerSerGluaspalaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThra 440 	420 he 1822 TC
ŭ °	SerLeuaspileLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420 	400 he
ŭ °	euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400 	380 e 1702 T
ŭ	ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380 	360 al 1642 TG
F ~	rGluAlaAlaGlyGlnArgProValHisProAlaSerV 360 AGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG 164	40 t 82 C
<u> </u>	roValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 3 	20 E
Ä	roLysSerLys) CAAAGAGCAAA	300 в 1462 А
į ·	leSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300 	280 hr] 1402 CTA
¥ °	LygArgMetAgpMetSerLeuAgpGluAlaTyrArgPheValLygGluLygArgProT 280 	260 et 1342 TG

S 문 ð 문 S 밁 S 밁 5 밁 ঠ 밁 S 밁 Ş 밁 S 문 8 몽 Ś 문 5 뫄 S 밁 S 吊 S 뭐 ð 문 S 문 ş 片 S

```
Sequence 1, Application US/09816494
Patent No. US20020034807A1
GENERAL INFORMATION:
APPLICANT: Meyers, Rachel A.
TITLE OF INVENTION: 38692 AND 21117, NOVEL DU.
TITLE OF INVENTION: 9HOSPHATASE MOLECULES AN
FILE REFERENCE: 10448-030002
CURRENT APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2001-03-23
FRIOR APPLICATION NUMBER: US/09/816,494
CURRENT FILING DATE: 2000-03-24
NUMBER OF SEQ ID NOS: 10
SOFTWARE: FRASESEQ for Windows Version 4.0
SEQ ID NO 1
LENGTH: 3544
                                                                                                                                                                                         밁
                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 11
US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
밁
                र्
                                            밁
                                                              5 8
                                                                                                              S
                                                                                                                                          망
                                                                                                                                                            S
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                맒
                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109 (1-665) x US-09-816-494-1 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                     Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-09-816-494-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: DNA
ORGANISM: Homo
FEATURE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             NAME/KEY: CDS
LOCATION: (589)...
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2482
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2422
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2542
                                               688
                                                                                              829
                                                                                                                                                                                                                                             649
                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         640
949
                     121
                                                                     101
                                                                                                                                           769
                                                                                                                                                                                            709
                                                                                                                   18
                                                                                                                                                                    61
                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                   21
                                                                                                                                                                                                                                                                                           MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
          LeuAlaGlyGlyPheAlaGluPheSerArgCy8PheProGlyLeuCy8GluGlyLy8Ser 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              luIleIleGluValSer 665
                                                                                                                                                                                             CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                             SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ACAGGTCACGGGAAGAGCTGGGGAAAGTGGGCAGTCAGCTTTTTCGGGCAGCATGG
CTTGCAGGTGGGTTTGCTGAGTTCTCTCGGTTGTTTCCCTGGCCTCTGTGAAGGAAAAATCC
                                                                                              CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                             GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                           AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                             AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               (2583)
                                                                                                                                                                                                                                                                                                                                                                  0
472.00
99.40%
99.40%
70.98%
9
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2558
                                                                                                                                                                                                                                                                                                                                                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DUAL SPECIFICITY AND USES THEREFOR
                                                                                                                                                                                                                                                                                                                                                                 0
663
2
0
0
 1008
                                                                     120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2481
                                                948
                                                                                              888
                                                                                                                      100
                                                                                                                                              826
                                                                                                                                                                                             768
                                                                                                                                                                                                                     60
                                                                                                                                                                                                                                                                    40
                                                                                                                                                                                                                                                                                             648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                      80
                                                                                                                                                                                                                                             708
```

320 SINGLUPTOVAIPTOAIAVAISETGIUGIYGINLYSSETGIUTHTPROLEUSETBrop 340	141 ThrLeuValProThrCysileSergInProCysLeuProValAlaAsnileGlyProThr 160 1009 ACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1068 161 ArgileLeuProAsnicuTyTLeuGlyCysGlnArgAspValLeuAsniysGluLeuIle 180 1669 CGAATTCTTCCCAATCTTTATCTTGGGCCAGCGAGATTGCCCAACACACAC
US-10-377-072-25 US-10-377-072-25 Sequence 25, Application US/10377072 Fublication No. US20040009501A1 GEMERAL IMPORMATION: APPLICANT: HYDORMATION: APPLICANT: Courtis, Rory A.J. APPLICANT: Logan, Thomas Joseph APPLICANT: Glucksmann, Maria A. APPLICANT: Holder, Maria A. APPLICANT: Williamson, Mark J. APPLICANT: Williamson, Mark J. APPLICANT: Williamson, Mark J. APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANT: Total, Fong-Ying APPLICANTON UNIBER: US 10/377,072 TITLE OF INVENTION: AND USES THEREFOR FILE REFERENCE: MP103-0180MUM CURRENT FILING DATE: 2003-02-27 PRIOR APPLICATION NUMBER: US 09/895,860 PRIOR APPLICATION UNMBER: US 09/895,860 PRIOR APPLICATION NUMBER: US 09/895,860 PRIOR PILING DATE: 2000-03-07 PRIOR FILING DATE: 2000-03-07 PRIOR FILING DATE: 2000-03-07 PRIOR PILING DATE: 2000-03-07 PRI	Db 2087 TATCTCCACTGCATCGAAGTGGGAGCACAATTACCACACCACCACTGCATTCCACTGCATCGAAGTGGGAGCACAATTACCACCACCACCACCACCTTTCGC Oy 520 lyLeuSerThrSerglnGlnHisteuThrIySerAlaGlyLeuGlyLeuGlyLeuGlyLeuGlyLeuGlyTrpH 2147 GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCCTGGCCTGGCCTTAAGGGCTGGC Oy 540 isSerAsplieLeuAlaProGlnThrSerThrProSerteuThrSerSerTrpTyrPheA Db 2207 ACTGGATATCTTGGCCCCCAGACCTGTACCCCTTCCCTGACCAGCAGCAGCTGGTATTTTG Oy 560 laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS 2267 CCACAGACTCTTACACTTCTACTCTGCCTCAGCAGTGCTATTTTG Oy 580 erAlaTySerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA Db 2327 CTGCTACAGCTGCAGCCACTTCCGGAGACCAGTCTATTCTGTCGCAGGC Oy 600 rgGlnLysBroSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG Db 2387 GGCGAAAGCCAAGTGACACGCCCCCCTTTGCGGAGGAGTGAAGAGAGCCCCTTTG Oy 610 lullysGlnPheLysArgAargSerCysGlnMetcluPheGlyGluSerTleMetSerGluA Oy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerAgaCATCAAGGCAAGAG Oy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerAgaCATCAAGGCAGCAGCAGCAGGCAGGCAGGCAGGCAGGCAG

Ş

유 밁 Ś 뫄 Ś 밁 Ś 밁 Ş В Ś g Ş В S В 5 밁 Ś 片 ঠ 밁 á D δ Ъ Ś 밁 8 닭 8 밁 5 片

```
PRIOR APPLICATION NUMBER: US 09/815,419
PRIOR FILING DATE: 2001-03-22
Remaining Prior Application data removed - 1
NUMBER OF SEQ ID NOS: 114
SOPTWARE: FASTSEQ for Windows Version 4.0
SEQ ID NO 25
LENGTH: 3544
TYPE: DNA
ORGANISM: Homo Sapiens
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(2586)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores
Pred. No.:
Score:
 중 유
                                       Ś
                                                                 밁
                                                                               र्
                                                                                                   밁
                                                                                                                           5
                                                                                                                                              망
                                                                                                                                                                   S
                                                                                                                                                                                           문
                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                       ঠ
                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                 8
                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                            ঠ
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                       á
                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ક
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-377-072-25
                                                                                                                                                                                              1009
                      1247
                                                                                                          1128
                                                                                                                                                     1069
                                                                  1187
  240
                                                                                      200
                                                                                                                                181
                                                                                                                                                                         161
                                                                                                                                                                                                                   141
                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                 689
                                                                                                                                                                                                                                                                                                       101
                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                       769
                                                                                                                                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                      41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                                                                                                                                                                                              AspCysPheLeuThrValLeuGeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                        CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                   AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                             H1sIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
  alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                       GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                       TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTG
                                                                  TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                        -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                     CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                        CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                             0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  See
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  File
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Wrapper
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ဝူ
                                                                 1246
                       1306
                                                                                                          1186
                                                                                                                                                                          180
                                                                                                                                                                                              1068
                                                                                                                                                                                                                                        1008
                                                                                                                                                                                                                                                                                                       120
                                                                                                                                                                                                                                                                                                                                                 100
                                                                                                                                                                                                                                                                                                                                                                       828
                                                                                                                                                                                                                                                                                                                                                                                                                 768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                   948
                                                                                                                                                                                                                                                                                                                                                                                            80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               40
                            밁
                                                 $ ·B $
                                                                                                               밁
                                                                                                                                  ઇ
                                                                                                                                                                            Ś
                                                                                                                                                                                                       밁
                                                                                                                                                                                                                      중 유
                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                       8
                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                     닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                       뮹
                                                                                                                                                                                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                                                                                                                                                                                          5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                  2027
                                                                                                                                                                                                                                                                                                                                                                                                                            1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1727
                                                                                                                                                                                                                                                                                             1967
                                                                                                                                                                                                                                                                                                                                       1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1307
                                                                                                                                                                                                                                                                                                                                                                                  1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1547
                                                                                                                                                                                   520
                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                             440
                                                                                                                                                                                                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                       rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                              erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                    isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                               hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                         laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                   euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                   AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCCTT
                                                                                                                                                                                                                                                             lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                        roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                 heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                        600
              620
                                  2386
                                                                             2326
                                                                                                  580
                                                                                                                     2266
                                                                                                                                           560
                                                                                                                                                                2206
                                                                                                                                                                                    540
                                                                                                                                                                                                          2146
                                                                                                                                                                                                                                                                                               2026
                                                                                                                                                                                                                                                                                                                                       1966
                                                                                                                                                                                                                                                                                                                                                                                   1906
                                                                                                                                                                                                                                                                                                                                                                                                       440
                                                                                                                                                                                                                                                                                                                                                                                                                             1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1366
                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                    2086
                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
```

밁

```
GENERAL INFORMATION: Millennium Pharmaceuticals Inc.
APPLICANT: Millennium Pharmaceuticals Inc.
APPLICANT: Curtis, Rory A. J.
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Logan, Thomas Joseph
APPLICANT: Meyers, Rachel E.
APPLICANT: Millenson, Mark J.
APPLICANT: Millenson, Mark J.
APPLICANT: Millenson, Mark J.
APPLICANT: Taal, Fong-Ying
ITILE OF INVENTION: AND USES THEREFOR
CURRENT APPLICATION NUMBER: US(10/377,072
FILE REFERENCE: MPI03-0180MNIM
CURRENT FILING DATE: 2001-06-29
FRIOR APPLICATION NUMBER: US(10/377,072
PRIOR PILING DATE: 2001-06-29
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR PILING DATE: 2000-06-29
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR APPLICATION NUMBER: US(10/377,072
PRIOR
                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                        Pred. No.:
                                                                                                                                                                                                                                                                                                    US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SOFTWARE: FASTSEQ
SEQ ID NO 25
LENGTH: 3544
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-377-072-25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                                                          TYPE: DNA
ORGANISM: Homo Sapi
FEATURE:
NAME/KEY: CDS
LOCATION: (589)...(
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 25, Ap
Publication No.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            lulleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGGTCÁCGGGAÁGÁGCTGGGGÁÁAÁGTGGGCAGTCAGTCTÁGCTTTTCGGGCÁGCÁTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              gnArgSerArgGluGluLeuGlYLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AAAAGCAGTTTÁAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGGGGAGCTGGCATGAAGAGAGCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Application US/10377072
o. US20040157221A9
                                                                                                                                                                                                                                                                                                                                                                                                                        Sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                      (2586)
                                                                  0
472.00
99.40%
99.40%
70.98%
                                                     Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                               3544
663
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2446
                                                              S
                                                                                                                       밁
                                                                                                                                                                         Ś
                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                             맑
                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   $
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ą
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   용
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-10-377-072-25 (1-3544)
                                                                                                                                                                                                                                        1487
                                                                                                                                                                                                                                                                                                                                                             1427
                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1187
                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                  280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1009
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           21
ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGGCGAGACGCCCCTCAGTCCAC 1606
                                                                                                                                    snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                              8nGlnThrGlyAlaSerGlyProLy8SerLy8LeuLy8LeuLeuHi8LeuGluLy8ProA 320
                                                                                                                                                                                                            ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                      hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                 etLysArgMetAspMetSerLeuAspGluAlaTyrArgpheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rtictal de de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del comencia del comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia del la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comencia de la comenc
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        rrarccccaagrercarrrectigegrerectigaargacagerrrregagaaaaarrr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            gCAGCÁGAÁTGGGÁTTGGTTÁTGTGTTÁÁATGCCÁGCAA-TÁCCTGTCCÁAÁGCCTGÁCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CGAATTOTTCCCAATOTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            -GlnGlnAsnGlyIleGlyTyrvalLeuAsnAlaSerTyr-ThrCysProLysProAspp 200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ThrLeuValProThrCysIleSerGlnDroCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            act chadrocchacor gear trerea de crir de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade de trade d
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAGAGGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TĠĊĀĠŦĊĀĠĀĀĠĠŦŦĠŦĀĠŦŦŦĀĊĠĀŦĊĀĀĀĠĊŦĊĊĊĀĀĠĀTĠŦŦĠĊĊŦĊŦĊŦĊŦĊŦĊŦĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HislleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                               1546
                                                                                                                                                                                                                                                                                                                                   1486
                                                                                                                                                                                                                                                                                                                                                                                            300
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             648
```

밁

8 밁

With

```
RESULT 14
US-10-425-114-26234
US-10-425-114-26234
Sequence 26234, App
Publication No. US:
Publication No. US:
APPLICANT: Liu, J.
APPLICANT: Zhou,
Sequence 26234, Application US/10425114
Publication No. US2004003488A1
GENERAL INFORMATION:
APPLICANT: Liu, Jingdong
APPLICANT: Zhou, Yihua
                                                                                                                                                                                                                                                                                                                                                                                          2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1607
                                                                                                                                                                                               2507
                                                                                                                                                                                                                                                             2447
                                                                                                                                                                                                                                                                                                                            2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                             640
                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                           600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                 luIleIleGluValSer
                                                                                                                                                                                                                                                                                 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                         18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLlysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      lnSerLyBArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                               snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                              AAAAGCAGTTTAAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                            GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                 rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                          CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                 AAATCATTGAGGTCTCC
                                                                                                                                                               665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1906
                                                                                                                                                                                                                                                              2506
                                                                                                                                                                                                                                                                                                                            2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                          2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1726
                                                                                                                                                                                                                                                                                                                                                                                          2386
                                                                                                                                                                                                                                                                                                                                                                                                                          600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               400
                                                                                                                                                                                                                                                                                                                                                            620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Query
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; FEATURE:
; OTHER INFORMATION:
US-10-425-114-26234
                         당
                                                         S
                                                                                               밁
                                                                                                                     S
                                                                                                                                                        밁
                                                                                                                                                                                          S
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                             문
                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                  ξ
                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-10-425-114-26234
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          APPLICANT: Kovalic, David K.
APPLICANT: Screen, Steven E
APPLICANT: Tabaska, Jack E
APPLICANT: Tabaska, Jack E
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21 (53313) B
CURRENT APPLICATION NUMBER: US/10/425,114
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 73128
SEQ ID NO 26234
LENGTH: 3625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   No . :
                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                            992
                                                                                                                                                                                                                                                                                                                                                                                          101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      752
                                                                                                                                                                                                                                                                                                                                                                                                                                                          81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21
                                                                                                                                                             AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                           CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           HisīleLeuGluAlaīleAsnīleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
   euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                   TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                   heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                    GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAanIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                     -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
472.00
99.40%
99.40%
70.98%
17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Clone
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ID:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  LIB4119-028-H6
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-3625)
                                                                                                    1289
                                                                                                                                                                1230
                                                                                                                                                                                                                                                                                                1111
      240
                                                                   220
                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                140
                                                                                                                                                                                                                                                                                                                                                              1051
                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                              991
                                                                                                                                                                                                                                                                                                                                                                                                                                                              100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           871
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         811
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         751
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          60
```

ঠ

밁 S 밁 ঠ 밁 S 밁 श 밁 5 밁 5 밁 ঠ

밁 S 밁 Ş 밁 ঠ 밁 S 밁 S 밁 ঠ 밁 S 밁

음 성 음 성

US-10-029-345A-109 (1-665)	580 erālaTyrSerCysSerClnLeuBroThrCysGlyAspGlnValTyrSerValArgArgA 600
Percent Similarity: 99. Best Local Similarity: 99. Query Match: 70. DB:	
	540 isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
; FEATURE: ; NAME/KEY: misc feature ; OTHER INFORMATION: Incy US-10-343-357-17	520 lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540
17 3766 IA I: Homo	۵
; PRIOR APPLICATION NUMBER; PRIOR FILING DATE: 2000- ; NUMBER OF SEQ ID NOS: 20 ; SOFTWARE: PERL Program	480 lnSerLyBArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500
	440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
; PRIOR APPLICATION NUMBER ; PRIOR FILING DATE: 2000 ; PRIOR APPLICATION NUMBER ; PRIOR FILING DATE: 2000	420 heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
	400 heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyp 420
; APPLICANT: GRIFFIN, Je; APPLICANT: YUE, Henry; APPLICANT: NGUYEN, Dann ; APPLICANT: KEARNEY, Li	380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
; GENERAL INFORMATION: ; APPLICANT: INCYTE GENOM ; APPLICANT: ELLIOTT, VI. ; APPLICANT: YAO, MONIQUE	340 roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
RESULT 15 US-10-343-357-17 US-10-67-17, Application Sequence 17, Application Publication No. US200400	320 snGluProValProAlaValSerGluGlyGlyGlyGlnLysSerGluThrProLeuSerProp 340
Db 2670 AAATCATTGAGG	300 snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
640 2610	280 hrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysa 300
Oy 620 luLyaGlnPheI	260 etlysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT 280
600 2490	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260
2430	

중 음 5

음 성 음

중 음 중

음 중 음

各유

S

Ś

8 8 8 8 8 8 8

유성

음성 음성 음

```
IDMBER: US/10/343,357
2003-01-28
2003-01-28
IBER: PCT/US01/23716
IO1-07-26
IDER: US 60/221,679
IO0-07-28
IBER: US 60/223,272
IO0-08-03
IBER: US 60/224,309
IO0-08-10
IBER: US 60/226,728
IO0-08-18
IBER: US 60/226,728
IO0-08-18
IBER: US 60/226,728
IO0-08-18
IBER: US 60/229,254
IO0-08-18
IBER: US 60/231,366
IO0-09-08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NOMICS, INC.; TANG, Y.Tom
Vicki S.; RAMKUMAR, Jayalaxmi
ique G.; BURFORD, Neil
mei E.; STEWART, Elizabeth A.
Ameena R.; ARVIZU, Chandra S.
estine A.; HAFALIA, April J.A.
g Aina M.; TRIBOULEY, Catherine M.
Jennifer A.; BAUGHN, Mariah R.
ry; WARREN, Bridget A.
Liam
Liam
                                          72.00
9.40
9.40
9.40
9.40
9.98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         yte ID No. US20040058341A1 7480570CB1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      on US/10343357
)058341A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Greree 2686
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC 2489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |ValSer 665
||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      OTEIN PHOSPHATASES
x US-10-343-357-17 (1-3766)
                          Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         3
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2549
```

320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP	1316 TGAAGAGAACATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAA	220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV 240	181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200	ThrieuvalProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr	ABPCY8PheLeuThrValLeuLeuGlyLy8LeuGluLy8SerPheA8nSerValHisLeu		1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
RESULT 16 US-10-648-593-115 US-10-648-593-115 ; Sequence 115, Application US/10648593 ; Publication No. US20040106132A1 ; GENERAL INFORMATION: ; APPLICANT: Brietol-Myers Squibb Company ; APPLICANT: Brietol-Myers Squibb Company ; TITLE OF INVENTION: INTERACT WITH AND/OR MODULATE PROTEIN TYROSINE KINASES AND/O ; TITLE OF INVENTION: PROTEIN TYROSINE KINASE PATHWAYS IN BREAST CELLS ; FILE REFERENCE: D0273 NP	Db 2396 AAAAGCAGTTTAAACGCAGAAGCCAGCAAATTGGAGAGAGCATCATGTCAGAGA Qy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG	N N	540 d 2156 d 560 d 2216 C 2216 C		Qy 460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG	Qy 420 heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA	Db 1616 TGCCCAGCGTGCCCAGCGTGCCGTGGCGTGGAAGAGGACAGCCGCGTGGTACAGGCGG Qy 380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
FOR PREDICTING ACTIVITY OF COMPOUNDS THAT DULATE PROTEIN TYROSINE KINASES AND/OR PATHWAYS IN BREAST CELLS	AATTTGAGAGAGCATCATGTCAGAGA 2455 erGlnSerSerPheSerGlySerMetG 660		roSerLeuThrSerSerTrpTyrPheA 560	spAsnTyrHisThrSerPheLeuPheG 520	euGlnThrAlaArgProSerAspSerG 480	ysProSerThrThrLeuAspGlyThrA 440	

8 8 8 8 8 8 8 8

8 8 8 8 8 8 8

S 당 음 성 음

Ş

밁 Ş 밁 S 음 성

음 성

음 정

음 성 음

ঠ

음 성

Db 723 GCAGCAGAATGGTTATGTTAAATGCCAGCAAATGCTACATCA 961 Db 723 GCAGCAGAATGGATTAGTTATGTTAAATGCCAGCCACCATCGCTACATCA 961	CTTGCAGGTTGCTGAGTTCTCTCGTTGTTTTCCCTGGCCTCTGTGAAAATCC ThrLeuValProThrCysileSerGlnProCysLeuProValAlaAsnIleGlyProThr ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCCAACAATCGCCAACCATTCCTAGTCCTACCTGCATTCTCAGCCTTGCCTTACCAACATTGGGCCAACCTACCT	364 81 424 101 484	1 MetalatisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20 11	CURRENT AF CURRENT FI PRIOR APPL PRIOR PILI NUMBER OF SOFTWARE: SEQ ID NO 1 LENGTH: DNA ORGANISM: -10-648-593 Lignment Sco ore: ore: No: treent Simil sery Match: :
18 5 18 5 5 19;	1622 AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAAGGTCCCTTT 1622 AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAAGGTCCCTTT 500 euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG 5	1442 440 1502 460 1562	30 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 3	Qy 260 etLysArgMetAspMetSerIeuAspGluAlaTyrArgPheValLysGluLysArgProT 280

	Score: 472.00 Matches: 663 Percent Similarity: 99.40% Conservative: 0 Best Local Similarity: 99.40% Mismatches: 2 Query Match: 70.98% Indels: 4 DB: 18 Gaps: 0 US-10-029-345A-109 (1-665) x US-10-357-930-20824 (1-5145)	PEATURE: NAME/KEY: misc feature LOCATION: 1, 5144, 5145 OTHER INFORMATION: n = A,T,C or G S-10-357-930-20824 Lignment Scores:	SOFTWARE: Fast SEQ for SEQ ID NO 20824 LENGTH: 5145 TYPE: DNA	PRIOR FILING DATE: 2000-06-09 PRIOR FILING DATE: 2000-07-18 PRIOR FILING DATE: 2000-07-18 PRIOR FILING DATE: 60/255,281 PRIOR FILING DATE: 2000-12-13 PRIOR FILING DATE: 2000-12-13	PRIOR PRIOR PRIOR PRIOR	; CURRENT APPLICATION NUMBER: US/10/357,930 ; CURRENT FILING DATE: 2003-02-04 ; PRIOR APPLICATION NUMBER: 00/185,276 ; PRIOR FILING DATE: 2003-02-16 ; PRIOR APPLICATION NUMBER: 60/183,319	TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-007BCN	_	អ៊ី ស៊	CY 660 lulleIleGluValSer 665	OY 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	Qy 620 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640
40 A A A A A A A A A A A A A A A A A A A	B & B &	,) B Q	D Q D	\$ B \$	D	당 <i>원</i>	용 성	D Qy	Qy Db	D Oy	B &
360 alproSerValGroProSerValGroProSerLeuLeuGluAspSerProLeuValGroAlaL 380			etLysargMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT	1247 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCCTCCAATGGATGTG 1306 240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260	200 helleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220		ArgieleuproasmieuTyrieuGlyCysGlmargaspValleuasmiysGluleuIle 	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160 		AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 	CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 	61 AgpLygValLeuileThrGluLeuileGlnHisSerAlaLygHisLygValAgpIleAgp 80

음 중 뫄 Ś 밁 Ş 밁 Ś 뮻 δ

```
APPLICANT: Schlegel, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEI
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE REFERENCE: MRI-007BCN
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 18
US-10-357-930-20969
; Sequence 20969, Application US/10357930
; Publication No. US20040259086A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ACAGGTCACGGGAAGAGCTGGGGAAAAGTGGGCAGTCAAGTTTTTCGGGCAAGCATGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ĠĠĊĀĠĀĀĠĊĊĀĀĠŦĠĀĊĀĠĀĠĊŦĠĀĊŦĊĠĊĠĠĊĠĠĀĠĊŦĠĠĊĀŦĠĀĀĠĀĠĀĠĊĊĊĊŦŦŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     rgGlnLysProSerAspArgAlaAspSerArgArgSerTzpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            creccinaciae recaeccia en recesar recesar en activa en conserva en
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1aThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   acticadataretridecececedadecretracecerrecerdadecadedaderigaratritig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 dectrrecadedadecadeadecadedadecidadecidadecidadeciradedecidade
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              lnSerLy8ArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        a Gade Addedati de Artico de la casa de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la como de la c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      cTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A CAĂGCTĂTĠĊĊĀĠŦŤĊŦĊĊĊĊŦĠŦŦĊĀĠĠĀĀĊŦĀŦĊĠĠĀĠĊĀĠĀĊŤĊĊĊĠĀĀĀĊĊĀĠŦĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 665
                                                                                                                                                                                                                                                                                                                  THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              560
                                                                                                                                                                                                                                                                                                                     ç
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; PRIOR FILING DATE: 2000-05-25; PRIOR APPLICATION NUMBER: 60/211,314; PRIOR PILING DATE: 2000-06-09; PRIOR PILING DATE: 2000-07-18; PRIOR APPLICATION NUMBER: 60/219,007; PRIOR FILING DATE: 2000-07-18; PRIOR APPLICATION NUMBER: 60/255,281; PRIOR FILING DATE: 2000-17-13; NUMBER OF SEQ ID NOS: 62232; SOFTWARE: FastSEQ for Windows Version 4.1; SEQ ID NO 20969; LENGTH: 5145; TYPE: DNA; ORGANISM: Homo sapiens; PRATURE: NAME/KEY: misc feature; NAME/KEY: misc feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = A,T,C or GUS-10-357-930-20969
                             밁
                                                                    δ
                                                                                                                                         밁
                                                                                                                                                                               δ
                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            g
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-029-345A-109 (1-665) x US-10-357-930-20969 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                    1069
                                                                                                                                                                                                                                                                                                                                                                  1009
                                                                                200
                                                                                                                                                                                           181
                                                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                                                     141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            H
                                                                                                                 helleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                               CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                   ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                             ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                              ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTTGCAGGTGGGTTTGCTGAGTTCTCGTTGTTTCCCTGGCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ĠĀĊĪĠŦŦŦŦĊŦĊĀĊĪĠŦĀĊŦŦĊŦĠĠĠŦĀĀĀĊĪĠĠĀĠĀĀĠĀĠĊŦŦĊĀĀĊŦĊŦĠŦŦĊĀĊĊŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            HislleLeuGluAlalleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
        1246
                                                                                                                                                                                                                               1127
                                                              220
                                                                                                                 1186
                                                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                                                             1068
                                                                                                                                                                                                                                                                                                                                                                                                160
                                                                                                                                                                                                                                                                                                                                                                                                                                                        1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  648
```

문 Ş 밁 Ş 뭐 Ş 문 Ś 멍 δ 밁 S 밁 Ś 밁 δ

유

```
2267
                                                                                       2207
                                                                                                                                              2147
                                                                                                                                                                                                      2087
                                                                                                                                                                                                                                                             2027
                                                                                                                                                                                                                                                                                                                     1967
                                                                                                                                                                                                                                                                                                                                                                            1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1367
                                                                                                                                                                                                                                                                                                                                                                                                                                      1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1247
                                                                                                                                                                                                                                 500
                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   340
                                                                                                                                                                         520
                                                                                                                                                                                                                                                                                        480
                                                                                                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
 580
                                                         560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                     isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                              GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                               lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLlysGlyTrpH
                                                                                                                                                                                                      TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                         euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                               lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                  roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                            snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                     heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                             laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                   CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                              ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCCCAGCGTGCCAGCGTGCAGCCGTCGCTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTATATCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCCAAAAGCCTCCAATGGATGTG
                              CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           340
                                                                                     2266
                                                                                                                                                                                                                                                                                                                                                                                                                                       1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1306
                            2326
                                                                                                                                             2206
                                                                                                                                                                                                      2146
                                                                                                                                                                                                                                                             2086
                                                                                                                                                                                                                                                                                                                     2026
                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                              1966
                                                                                                                                                                                                                                                                                                                                                                                                           460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1486
600
                                                                                                                                                                         540
                                                                                                                                                                                                                               520
                                                                                                                                                                                                                                                                                        500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    400
                                                                                                 Query
                맑
                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      맑
                                                                                                                  Match:
                                                                                                                                                                         No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  620
                589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  099
                                          μ
```

ð

밁

S

당

뭐

 밁

8 8 8 8 8 8 8 8 8 8 8 8

S

8 8 8 8 8 8 8 8

ঠ

중 음

중 유

밁

```
GENERAL INFORMATION:
APPLICANT: Schlege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS
ITITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR PRIOR FILING DATE: 2000-07-18
PRIOR PRIOR FILING DATE: 2000-07-18
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRI
                                                                                                                                                                                                                             Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 19
US-10-357-930-21071
                                                                                                                US-10-029-345A-109 (1-665)
                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 21071, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION
AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                        0
472.00
99.40%
99.40%
70.98%
                                                                                                                x US-10-357-930-21071
                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                   (1-5145)
                                                                                                                                                                  5145
663
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ION, AND
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       FOR
THERAPY
                                                             20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          얶
```

320 snGluProvalProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProp 340 1547 ATGAACCTGTCCCTGCTGTCTCCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC 1606 340 roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360 [280 hrileSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300	240 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260				AspC:	709 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG 768 61 ABPLYSVAILeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80	
RESULT 20 US-10-357-930-21083 US-10-357-930-21083, Application US/10357930 Sequence 21083, Application US/00359986A1 Publication No. US20040259086A1 GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John TITLE OF INVENTION: HOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF FILE REFERENCE: MAI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04			Qy 560 laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS 580	Qy 520 lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540	480 lnse 2027 AGAG 500 euse: 2087 TATC	440 snlysleucysclnpheSerProValgIngluLeuSerGlugInThrProGluThrSerP 460	1787 TCTC 420 he86 1847 TCTC	Db 1727 TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCCTCAAGCGTTCCT 1786

8 B 8

B & B & B &

음 성 음

성 음 성

음 성 음

중 음 중

В

8 8 8 8 8 8 8 8

8 & 8

음 성 음 성

```
TYPE: DNA

ORGANISM: Homo sapiens

FEATURE:

NAME/KEY: misc_feature

LOCATION: 1, 5144, 5145

OTHER INFORMATION: n = A,T,C o.

US-10-357-930-21083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR FILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-02-17
PRIOR PILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-26
PRIOR PILING DATE: 2000-05-29
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEO ID NOS: 62232
SOPTWARE: PASTSEQ for Windows Version 4.
PRIOR TINS 1445
 ફ
                            밁
                                                  S
                                                                                    밁
                                                                                                       र्
                                                                                                                                         В
                                                                                                                                                                S
                                                                                                                                                                                               밁
                                                                                                                                                                                                                     ঠ
                                                                                                                                                                                                                                                       망
                                                                                                                                                                                                                                                                               á
                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Alignment Scores:
Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            US-10-029-345A-109 (1-665) x US-10-357-930-21083 (1-5145)
                             1069
                                                                                     1009
                                                        161
                                                                                                                                          949
                                                                                                                                                                                                 889
                                                                                                              141
                                                                                                                                                                     121
                                                                                                                                                                                                                           101
                                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                               769
                                                                                                                                                                                                                                                                                                                                                                      709
                                                                                                                                                                                                                                                                                                                                                                                                                               649
  181
                                                                                                                                                                                                                                                                                   81
                                                                                                                                                                                                                                                                                                                                          61
                                                                                                                                                                                                                                                                                                                                                                                                  41
                                                                                                                                                                                                                                                                                                                                                                                                                                                          21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Н
                                                                                                                                       AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                         Cy6SerGlnLy6ValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                    HisIleLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                            SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                            ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                    ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                               GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                         CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                               AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                             CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                     ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1
                                                                                    1068
                                                                                                                                          1008
                                                                                                              160
                                                                                                                                                                      140
                                                                                                                                                                                                                             120
                                                                                                                                                                                                                                                         888
                                                        180
                                                                                                                                                                                                 948
                                                                                                                                                                                                                                                                                  100
                                                                                                                                                                                                                                                                                                               828
                                                                                                                                                                                                                                                                                                                                          80
                                                                                                                                                                                                                                                                                                                                                                      768
                                                                                                                                                                                                                                                                                                                                                                                                  60
                                                                                                                                                                                                                                                                                                                                                                                                                              708
                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                20
             S
                                         밁
                                                                S
                                                                                                                  र्
                                                                                                                                                      밁
                                                                                                                                                                               δ
                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                 5
                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                            8
                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                        5
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          문
                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                 2087
                                                                                                                                                         2027
                                                                                                                                                                                                              1967
                                                                                                                                                                                                                                                                      1907
                                                                                                                                                                                                                                                                                                                              1847
                                                                                                                                                                                                                                                                                                                                                                                                                                            1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1307
                540
                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                            GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                            lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                 TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                    euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                      lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                               CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                             roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                    snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                            TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                           heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                      TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                   heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                            TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerGlyLeuHi BLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2146
                                                                                                                                                                                                                                                                                                                                                                                      1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1426
                                            2206
                                                                      540
                                                                                                                           520
                                                                                                                                                         2086
                                                                                                                                                                                                                                          480
                                                                                                                                                                                                                                                                      1966
                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                              1906
                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                            1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1186
                                                                                                                                                                                   500
                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 240
                                                                                                                                                                                                              2026
```

밁

```
US-10-357-330-21303

US-10-357-330-21303

Sequence 21303, Application US/10357930

Publication No. US20040259086A1

APPLICANT: Schlegel. Robert

APPLICANT: Schlegel. Robert

TITLS OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-007BCN

CURRENT APPLICATION HUMBER: US/10/357,930

PRIOR PELILING DATE: 2003-02-04

PRIOR APPLICATION NUMBER: US/10/357,930

PRIOR FILING DATE: 2003-02-16

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/212,007

PRIOR FILING DATE: 2000-05-25

PRIOR PILING DATE: 2000-05-25

PRIOR
                                Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                          Pred. No.;
                                                                                                                     Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 21
US-10-357-930-21303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             음 성 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           뭥
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                중 음
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lullelleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          snArgSerArgGluGluLeuGlYLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          creccracaerecaectaectaectececaerrecegaeaeceaererarrecretececaee
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ccacagagrecreaciacireracrerecereaceareracegagegeagreceagrace
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                          0
472.00
99.40%
99.40%
70.98%
18
                      Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                     5145
663
0
2
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           THERAPY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           읝
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2266
                           Ş
                                                            문
                                                                                     S
                                                                                                                     B
                                                                                                                                              δ
                                                                                                                                                                                뭐
                                                                                                                                                                                                       8
                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                         Ş
                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109 (1-665) x US-10-357-930-21303 (1-5145)
                                                                                                                    1487
                                                                                                                                                                                1427
                                                                                                                                                                                                                                             1367
                                                                                                                                                                                                                                                                                                      1307
                           340
                                                                                                                                                                                                                                                                                                                                                                    1247
                                                                                                                                                                                                                                                                                                                                                                                                                               1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1128
                                                                                                                                                   300
                                                                                                                                                                                                              280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1009
                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                           200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       41
roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProvalHisProAlaSerV
                                             ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGAGGCGCCCTCAGTCCAC
                                                                 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                        ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                          snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                     CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                        hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                 rreradigeaerdrinaderoddarereedereedeeaecarederarederakedeerake
                                                                                                                                                                                                                                                                                                             alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                         TGCCGTGGTTGGACAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                         TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT 1246
                                                                                                                                                                                                                                                                                                                                                                                                                                      heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACTCTAGTCCCTACCTGCATTTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    AspLysValleuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Agrigaaacigaaaaaagrigerigetaarrigarageeggeearrrigriggaaracaaracaree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             SerGlyThrGluLy8ValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                         1 320
                  360
                                               1606
                                                                           340
                                                                                                          1546
                                                                                                                                                                      1486
                                                                                                                                                                                                                                   1426
                                                                                                                                                                                                                                                                                                                           260
                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                              1366
                                                                                                                                                                                                                                                                                                                                                         1306
                                                                                                                                                                                                                                                                                                                                                                                      240
                                                                                                                                                                                                                                                               280
                                                                                                                                                                                                                                                                                                                                                                                                                                                 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        648
```

```
ঠ
RESULT 22
US-10-357-930-21307
Sequence 21307, Application US/10357930
Publication No. US20040259086A1
GENERAL INFORMATION:
APPLICANT: Schlegel Robert
APPLICANT: Endege, Wilson
                                                                                                                                                                                                                                                         ঠ
                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                          ठ
                                                                                                                                                                                                                                                                                                                                                      ð
                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                     Ś
                                                                                                                                            음 성
                                                                                                                                                                                    문
                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                  2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1607
                                                                                                                                               2507
                                                                                                                                                                                           2447
                                                                                                                                                                                                                                        2387
                                                                                                                                                                                                                                                                                       2327
                                                                                                                                                                                                                                                                                                                                     2267
                                                                                                                                                                                                                                                                                                                                                                                    2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1667
                                                                                                                                                                                                                                                               600
                                                                                                                                                                                                                                                                                                                                                             560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            400
                                                                                                          lullelleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                 isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                           snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                          luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGl
                                                                                                                                                                                                                                         GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                        rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                     erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                     CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                    laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                             lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                AAATCATTGAGGTCTCC
                                                                                                                                               AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                2583
                                                                             . ;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1906
                                                                                                                                               2566
                                                                                                                                                                                            2506
                                                                                                                                                                                                                                        2446
                                                                                                                                                                                                                                                                                       2386
                                                                                                                                                                                                                                                                                                                                     2326
                                                                                                                                                                                                                                                                                                                                                                                    2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1666
                                                                                                                                                                     660
                                                                                                                                                                                                                  640
                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                           580
                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                       540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           400
                                                                                                                                                       á
                                                                                                                                                                                                 S
                                                                                                                                                                                                                                                                                                 S
               S
                                                         ð ~ 유
                                                                                                     S
                                                                                                                                 밁
                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                             S
                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                            Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        No.:
               141
                                                                                     688
                                                                                                           101
                                                                                                                                   829
                                                                                                                                                                                                                                                                            649
                                                                                                                                                                                                                                                                                                                          589
                                                              121
                                                                                                                                                                                769
                                                                                                                                                                                                                              709
                                                                                                                                                         81
                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                    41
                                                                                                                                                                                                                                                                                                  21
```

```
; TYPE: DNA
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,
US-10-357-930-21307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           APPLICANT: MONAHAN, JOHN
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILL REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT TLING DATE: 2003-02-04
PRIOR FILING DATE: 2003-02-04
PRIOR PRIOR PRILING DATE: 2003-02-16
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/213,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/210,007
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    US-10-029-345A-109 (1-665) x US-10-357-930-21307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 21307
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                            MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                  AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                      GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                              AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                            GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR
THERAPY
                                                                                                            140
                                                                    1008
                                                                                                                                                        948
                                                                                                                                                                                                                                          888
                            160
                                                                                                                                                                                                                                                                                    100
                                                                                                                                                                                                                                                                                                                                                                      80
                                                                                                                                                                                                                                                                                                                                                                                                                                                        60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      648
                                                                                                                                                                                                                                                                                                                              828
                                                                                                                                                                                                                                                                                                                                                                                                              768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ဝှု
```

1907 ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC 1966 460 roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG 1966 1967 CTGATAAGGAAGCCAGCCCCCAAGAAGCTGCAGACCAGCC 2026 480 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500 [7 P—P H—0 H—0	320 s 547 A 140 r 107 C 60 a 67 T	etlysärgMetäspMetäspfeuäspGluälafyrargPheVallysGlulysärgProf 280	1187 TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAAGCCTTCGCATTGTGTGAAAAATTT 1246 220 euProTrpLeuAspLysSerValAspPheileGluLysAlaSerAsnGlyCysV 240 1247 TGCGTGGTTGGACAAATCAGTAGAATTTCATTGAGAAAAGCCTCCAATTGATGATGTGTGACAAAACTTGAGAAAAGCCCCCAATTGATGATGATTGTGAGAAAAGCCTTCCAATTGATGATTGAGAAAAGCCTCCAATTGATTG	1009 ACTCTAGTCCCTACCTGCATTTCTCAGGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC 1068 161 ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 1069 CGAATTCTTCCCAATCTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127 181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200 1128 GCAGCAGAATGGGATTGGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT 1186
FILING DATE: APPLICATION FILING DATE: OF SEQ ID N RE: FastSEQ NO 22820 H: 5145 DNA IDNA IDNA IDNA IDNA IDNA IDNA IDNA	CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR FILING DATE: 2003-02-16 PRIOR PILING DATE: 2003-02-16 PRIOR PILING DATE: 2000-02-17 PRIOR PILING DATE: 2000-03-16 PRIOR PILING DATE: 2000-03-16 PRIOR PILING DATE: 2000-05-25 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR PILING DATE: 2000-06-09 PRIOR APPLICATION NUMBER: 60/219,007	RESULT 23 US-10-357-930-22820 ; Sequence 22820, Application US/10357930 ; Publication No. US20040259086A1 ; Publication No. US20040259086A1 ; GENERAL INFORMATION: APPLICANT: Schlegel. Robert ; APPLICANT: Bndege, Wilson ; APPLICANT: Monahan, John ; TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR ; TITLE OF INVENTION: HUMAN PROSTATE CANCER ; FILE REFERENCE: MRI-007BCN		Db 2267 CCACAGAGTCCTCACACTTCTACCTCGCGGAGGCAGTCGCCGTTGC 2326 Qy 580 erAlaTyrSerCysSerGlaserThatCysGlyAspGlnValTyrSerValArgArgA 600	520 lyLe 2147 GCCT 540 lisse 2207 ACTC

유 정

음 성 망 Ś

유 성

DЬ 8 8

5

유왕

В Ś 문 8 망 S 덩 8 밁 Ś 음 성

Qy 260 etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheVallysGluLysArgProT 280	Qy 220 euProTrpLeuAspLysSerValAspPheIleGluLysAlaSerAsnGlyCysV 240 [Qy 181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProAspP 200	Db 1009 ACTCTACTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127	889 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 121 LeuAlaGlyGlyPheAlaGluPheSerArgCy8PheProGlyLeuCy8GluGlyLy8Ser	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 10	Qy 41 HisileLeuGluAlaileAsmIleAsmCysSerLysLeuWetLysArgArgLeuGlnGln 60	OF SHARING CHARLES OF THE CONTROLL OF THE CONTROLL OF THE CONTROLL OF THE CONTROLL OF THE CONTROLL OF THE CONTROL OF THE CONTR	ignment Scores: ed. No.: 472.00 Matches: 663 ** ** ** ** ** ** ** ** *
B & B & B &	Qy Db	Q	Q B Q B	8 B 8 B	& B &	B 6 B 6	D Qy Db	Q
620 lulysGlnPheLysArgAergSerCysGlnMetGlnDheGLyGluSerIleMetSerCluA 640 [1]	CTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC CTGCCTACAGCTGCAGCCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC rgGlnLy8ProSerAspArgAlaAspSerArgArgSerTrpH1sGluGluSerProPheG		2087 TATCTCCACTGCATCGAACTGGAACTAGGACAATTACCACCAGCTTCCTTTTCG 2146 520 lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH 540	1967 CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC 2026 480 lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL 500	snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP	400 heSerLeuAspileLysSerValSerTyrSerAlaserMetAlaAlaserLeuHisGlyp 420	TGCCCAGCGTGCCCAGCGTGCAGCCGCCGTGTTAGAGAGACCCGCTGGTACAGGCGC euSerGlyLeuHisLeuSerAlaAspArgLeuGluspSerAsnLysLeuLysArgSerP	320 sngluproValProAlaValSergluGlyGlyGlnLysSerGluThrProLeuSerProP 340

```
WS-10-357-930-26669

Sequence 26669, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:
APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson
APPLICANT: MORAHAN, John

TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR FILING DATE: 2003-02-16

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-03-16

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-05-25

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-06-09

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION SUMBER: 60/255,281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TYPE: DNA

ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A
US-10-357-930-26669
                                        Ś
                                                                        멁
                                                                                              5
                                                                                                                               밁
                                                                                                                                                           S
                                                                                                                                                                                          문
                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                               Ş
                                                                                                                                                                                                                                                                                                                                                                                                  Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109 (1-665) x US-10-357-930-26669 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores:
                                        101
                                                                      829
                                                                                                                               769
                                                                                                                                                                                         709
                                                                                                                                                                                                                                                   649
                                                                                                                                                                                                                                                                                                           589
                                                                                                 81
                                                                                                                                                           61
                                                                                                                                                                                              41 HisīleLeuGluAlaīleAsmīleAsmCysSerLysLeuMetLysArgArgLeuGlmGlm 60
                                                                                                                                                                                                                                                                              21
CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                     ĊĀĊĀTŦŦŦĠĠĀĀĠĊĊĀŦŦĀĀŦĀŦĊĀĀĊŦĠĊŦĊĊĀĀĠĊŦŦĀŦĠĀĀĠĊĠĀĀĠĠŤŦĠĊĀĀĊĀĠ
                                                                                                                                                                                                                                                    SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer 40
                                                                                                                                                                                                                                     AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                               ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTGCTGCAGAA
                                                                                                                                                                                                                                                                                                             5145
n = A,T,
                                                                                                                                                                                                                                                                                                                                                                                             0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ç
                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                        0440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      THERAPY
                             120
                                                          888
                                                                                    100
                                                                                                                  828
                                                                                                                                                80
                                                                                                                                                                            768
                                                                                                                                                                                                                                      708
                                                                                                                                                                                                                                                                                                648
                                                                                                                                                                                                                                                                                                                           20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ç
            밁
                               5
                                                                   밁
                                                                                       5
                                                                                                                          밁
                                                                                                                                                        δ
                                                                                                                                                                               맑
                                                                                                                                                                                                             S
                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Ś
                                                                   1907
                                                                                                                             1847
                                                                                                                                                                                      1787
                                                                                                                                                                                                                                              1727
                                                                                                                                                                                                                                                                                                        1667
                                                                                                                                                                                                                                                                                                                                                                 1607
                                     460
                                                                                                                                                                                                                                                                                                                                                                                                                           1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1487
                                                                                              440
                                                                                                                                                        420
                                                                                                                                                                                                                  400
                                                                                                                                                                                                                                                                          380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1307
                                                                                                                                                                                                                                                                                                                                                                                             340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1187
                                                                                                                                                                                                                                                                                                                                                                                                                                                      320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1128 GCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   121
                                                        roAspLysGluGluAlaSerIleProLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                 TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                     heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                           heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                     rcagregectige accircice cagacage crega agacage a araa agac reaage errect
                                                                                                                                                                                                                                                    alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                             roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rrcradrideacridrinaderidadarerecederecedecacearederiaredecriacarea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rtaticciccaagicicatriticcigegigigecigigaatgacagerititgigagaaaatri
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ArgileLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsmIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                    460
2026
                            480
                                                                                                                  1906
                                                          1966
                                                                                                                                              440
                                                                                                                                                                            1846
                                                                                                                                                                                                                                     1786
                                                                                                                                                                                                                                                                                                                           380
                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                 400
                                                                                                                                                                                                                                                                                                                                                       1666
                                                                                                                                                                                                                                                                                                                                                                                                                1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1306
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1186
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1008
```

```
FILE REFERENCE: MAL-UUTBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR PRIDATION NUMBER: 09/785,276
PRIOR PILING DATE: 2003-02-16
PRIOR PELICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR PELING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR PILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FRSELSEQ for Windows Version 4.0
SEQ ID NO 26815
LENGTH: 5145
            RESULT 25
US-10-357-930-26815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ð
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S
                                                                                                                                                                                                                                                                                               Sequence 26815, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2387
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2327
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         AAAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1sSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               lnSerLysArgLeuHisSerValArgThrSerSerGerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGCCTACAGCTGCAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCAGCTGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                             Q
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ; ORGANISM: Homo sapiens FEATURE; PEATURE; NAME/KEY: misc feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = PUS-10-357-930-26815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Percent Similarity:
Best Local Similarity:
Query Match:
                                             8
                                                                            밁
                                                                                                   S
                                                                                                                          밁
                                                                                                                                                        Ś
                                                                                                                                                                                      밁
                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                   Ś
                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                    ঠ
                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                 δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      멹
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   US-10-029-345A-109 (1-665) x US-10-357-930-26815
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Score:
                        1367
                                                                                                                                                                                       1187
                                                                                                                                                                                                                                             1128
                                                                                                                                    1247
                                                                                                                                                                                                                                                                                                  1069
                                                                                                                                                                                                                                                                                                                                                        1009
                                                                                                                                                            220
                                                                                                                                                                                                                 200
                                                                                                                                                                                                                                                                       181
                                                                                                                                                                                                                                                                                                                            161
                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                             949
                                                                                                                                                                                                                                                                                                                                                                                                                                      121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   688
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                                                                                                                                                                                                                          etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                  ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                           LeuAlaGlyGlyPheAlaGluPheSerArgCy8PheProGlyLeuCy8GluGlyLy8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Hi8IleLeuGluAlaIleAsnIleAsnCysSerLy8LeuMetLy8ArgArgLeuGlnGln
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                        heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL
                                                                                                                                                                                                                                                                                                                                                                        ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                    TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                               euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                                                                                                                                       TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                              CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    5145
n = 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A, T, C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ö
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      G
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (1-5145)
                         1426
                                                   280
                                                                               1366
                                                                                                                                    1306
                                                                                                                                                            240
                                                                                                                                                                                         1246
                                                                                                                                                                                                                                             1186
                                                                                                                                                                                                                                                                                                                                                        1068
                                                                                                                                                                                                                  220
                                                                                                                                                                                                                                                                        200
                                                                                                                                                                                                                                                                                                                                                                                   160
                                                                                                                                                                                                                                                                                                                                                                                                              1008
                                                                                                                                                                                                                                                                                                                                                                                                                                         140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        20
```

```
snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                             rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                             CTGCCTACAGCTGCAGCTAGCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                       erAlaTyrSerCysSerGlnLeuDroThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CCACAGAGTCCTCACACTTCTACTCTGCCTCAGCCATCTACGGAGGCAGTGCCAGTTACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Actodataretregecececagaceteraceeerreectigaceageagerggrantitig
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 eccirricca chadeca de a de a començão de como 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ĊŦĠĀŤĀĀĠĠĀĠĠĀĀĠĊĊĀĠĊĀŤĊĊĊĊĀĀĠĀĀĠĊŤĠĊĀĠĀĊĊĠĊĊĀĠĠĊĊŦŦĊĀĠĀĊĀĠĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ACAAGCTÁTGCCÁGTTCTCCCCCTGTTCÁGGAÁCTÁTCGGAGCAGACTCCCGAÁAACCÁGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       snLysLeuCysGlnPheSerProvalGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TCTCCTCATCAGAAGATGCTTTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               réreredáhrárcadárca erricktarreda geca geargea gearectraca reger 1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             reccaderácea de caracida de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de construcción de co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alProSerValProSerValGlnProSerLeuGluAepSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisBroAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ĊĊŦĠŦĠĊĊĠĂĊŦĊŦĠĊŦĀĊĊŦĊĀĠĀĠĠĊĀĠĊĀĠĠĀĊĀĀĀĠĠĊĊĊĠŦĠĊĀŦĊĊĊĠĊĊĀĠĊĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     smGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      accadacredadcarcaddecaaaddaadcaaaacredadcredcredaccredadaaadceaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snGlnTbrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        660
                                                                                                                                                           640
                                                                                                                                                                                                                                          2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            600
                                                                               2506
                                                                                                                                                                                                                                                                                                                      620
                                                                                                                                                                                                                                                                                                                                                                                             2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GENERAL INFORMATION:
APPLICANT: Schlege, Wilson
APPLICANT: Eschlege, Wilson
TITLE OF INVENTION: MOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HOLD HOLD ASSESSMENT, PREVENTION, AND THERAPY OF
TITLE OF INVENTION: LIDENTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
TITLE OF INVENTION: HUMAN PROSTATE CANCER

FILE REFERENCE: MRI-0078CN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 00/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/217,454
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-25
PRIOR PRIOR APPLICATION PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRI
                                 밁
                                                                                       Ś
                                                                                                                                                                               뮍
                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                                                                  á
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109 (1-665) x US-10-357-930-26912 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; FEATURE:
; NAME/KEY: misc feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-26912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 26
US-10-357-930-26912
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 26912, Application US/10357930 Publication No. US20040259086A1
                             769
                                                                                                                                                                               709
                                                                                                                                                                                                                                                                                                                                           649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                    61
                                                                                                                                                                                                                                                       41
                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          660
                                                                                                                                                                                            | HisileLeuGluAlaIleAsnIleAsnCysSerLysLeuMetLysArgArgLeuGlnGln
                                              AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                               CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                         Arddcccardadardatrogaacrcaaarrorracrdadadorrogrddcrcrdcrdcaa
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AAATCATTGAGGTCTCC 2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            luIleIleGluValSer 665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       õ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length:
Matches:
Conservative:
Mismatches:
Indels:
```

밁 Ś 밁 ş B Ś 밁 Ś 片 Ş 뫄 Ś 밁 Ś 문 S 밁 Ś 밁 Ś В Ş 밁 Ś 밁 δ 밁 Ş 뮍 S Дb Ş 밁 δ 밁 5

2447

2387

60 768

708

648 40

600

2327

580

2267

560

2207

2147

520

540

2087

500

2027

480

1967

460

1907

440

1847

420

1727

380

400

1607

340

360

1547

320

1487

300

; PRIOR FILING DATE: 2000-07-18	440 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP 460
PRIOR FILLING DATE: 2000-05-25 PRIOR FILLING DATE: 2000-06-09 PRIOR APPLICATION NUMBER: 60/211,314 PRIOR FILLING DATE: 2000-06-09 PRIOR FILLING DATE: 2000-06-09	420 heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA 440
PRIOR FILLING DATE: 2000-02-17 PRIOR PELLING DATE: 2000-03-16 PRIOR APPLICATION NUMBER: 60/189,862 PRIOR PELLING DATE: 2000-03-16 PRIOR PELLING DATE: 2000-03-16	400 heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP 420
CURRENT FILING DATE: 2003-02-04 ; CURRENT FILING DATE: 2003-02-04 ; PRIOR APPLICATION NUMBER: 09/785,276 ; PRIOR FILING DATE: 2003-02-16 ; PRIOR FILING DATE: 2003-02-16	380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400
TITLE OF INVENTION: INCREMENTATION, ASSESSMENT, PREVENTION, AND THERAPY OF TITLE OF INVENTION: HUMAN PROSTATE CANCER ; TITLE OF INVENTION: HUMAN PROSTATE CANCER ; FILE REFERENCE: MRI-0078CN ; FILE REPERENCE: MRI-0078CN ; FILE REPERENCE: MRI-0078CN	360 alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
THIONG KITTO NATURALINA	340 roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
US-10-357-930-26923 US-10-357-930-26923, Application US/10357930 ; Sequence 26923, Application US/10357930 ; Publication No. US20040259086A1 ; GENERAL THEOREMETON.	320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
Db 2567 AAATCATTGAGGTCTCC 2583	300 snglnThrGlyAlaSerGlyProLysSerLysLeuLeuHisLeuGluLysProA 320
2507 ACAGGTCACGGGAAGAG	280 hrileSerProAsnPheAsnPheLeuGlyGinLeuLeuAspTyrGluLysLysIleLysA 300
620 ILLYSSIERRELYSETSYSSETSYSTERSETTYSTERSETTETHE CETTETHE , 260 etlysärgMetäspMetäerLeuäspGluälaTyrärgPheValLysGluLysärgProt 280	
600 rgd:nnystroseraspargalaaspserargargsserirphisgiudiusertroprieg	240 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM 260
580 eratalyrsertysserturbeurrointrysspynspynnyallyrsertyalargarga	220 euProTrpLeuAspLysSerValAspDheIleGluLysAlaLysAlaSerAsnGlyCysV 240
560 laThrGiuserSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS	200 heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
540 isserAspileLeuAlaProGInThrSerThrProSerLeuThrSerSerTrpTyrPheA	181 -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP 200
520 typeuserintserginginhialeutningseralagiyeeugiyeeuggetiph	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
SOU euserroueuniangseroiyservaigumaphaniyiniaintserroueurney	141 ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
480 InSeriyaArgieuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerIeuL	121 LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
460 zoAsplysGluGluAlaSerILePzoLysLysLeuGLITTNALSAXgPYOSezAspSerG	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120
1907 ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGCTCCCGAAACCAGTC	81 CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer 100

음 중

음 성

Ś

ঠ 망 음 성 음

र्ठ 밁 **청** 음

ঠ

음 성

밁

á

문

S

음 성 음

음 성

Ş

밁

중 음 중

음 성

유정

음 성

```
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
NUMBER OF SEQ.ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.(
SEQ ID NO 26923
LENGTH: 5145
TYPES: DNA
ORGANISM: Homo sapiens
FARTURE:
NAME/KEY: misc_feature
LOCATION: 1, 5144, 5145
OTHER INFORMATION: n = A,T,C or G
US-10-357-930-26923
                                                                                                                                                                                                                                                                                                                           밁
                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         В
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-357-930-26923
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                No.:
                                                                                                                                                                                                                 1187
                                                                                                                                                                                                                                                                                                                        1128
                                                                                                                                                                                                                                                                                                                                                                                                                             1069
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1009
                                                             240
                                                                                                                                                                                                                                                                   200
                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21
                                 alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                        GCAGCAĞAATGGGATTĞGTTATĞTĞTTAAAATĞCCAĞCAA-TACCTĞTCCAAAĞCCTĞACT
                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                     ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  crrecaderederrieciaderricicircerrerricciredecereigiaaadaadaree
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer 140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          0
472.00
99.40%
99.40%
70.98%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            5145
663
0
2
0
                                                                                      1306
                                                                                                                                                                                             1246
                                                                                                                                                                                                                                                                                                  1186
                                                                                                                                        240
                                                                                                                                                                                                                                             220
                                                                                                                                                                                                                                                                                                                                                                                                      1127
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1068
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   648
                                                  Ś
                                                                                                    유
                                                                                                                                                                                        片
                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                       δ
                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  멎
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               뫄
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            당
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                2207
                                                                                                                                                                                                                                                                                                                                                                                                                       2147
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2087
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2027
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1787
                                                                                                                                                                                                                                                                                                                                                               540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   300
rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                              crecciacaecrecaeciaeciaeciececaciriececaecaaeceaaecrarrerererececaeec
                                                                                                               erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                     ACTCGGATATCTTGGCCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                        18SerAspIleLeuAlaProGlnThrSerThrDroSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                 ĠĊĊŢŢŢĊĊĀĊĊĀĠĊĊĀĠĊĀĠĊĀĊĊŢĊĀĊĠĀĀĠŢĊŢĠĊŢĠĠĊĊŢĠĠĠĊĊŢŢĀĀĠĠĠĊŢĠĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                               euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ĊŦĠĀŦĀĀĠĠĀĠĠĀĀĠĊĊĀĠĊĀŦĊĊĊĊĀĀĠĀĀĠĊŦĠĊĀĠĀĊĊĠĊĊĀĠĠĊĊŦŤĊĀĠĀĊĀĠĊĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACAAGCTATGCCAGTTCTCCCCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rerecrearcagaagargerriggaaracracaaacerrecaeracrerggarggacea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heSerSerSluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      rerereres a receivada de la composita de la co
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TGCCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               construction of the contract of the construction of the contraction of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the contract of the con
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Accadactoda de la companya de la com
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               CTATATCTCCAAACTTCAATTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA 1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                   600
                                                                                   2386
                                                                                                                                                                                        2326
                                                                                                                                                                                                                                             580
                                                                                                                                                                                                                                                                                                                                                 560
                                                                                                                                                                                                                                                                                               2266
                                                                                                                                                                                                                                                                                                                                                                                                    2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      480
                                                                                                                                                                                                                                                                                                                                                                                                                                                      540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1366
```

밁 S 밁 S

Pred. No.: Pred. No.: Score: Score: Score: Percent Similarity: 99.40% Best Local Similarity: 70.98% Conservative: 10 Best Local Similarity: 99.40% Indels: 12 Query Match: 18 Qy 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 18 Qy 1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20 Qy 21 SerGlyThrGluLy8ValLeuLeuIleAspSerArgBragGTTGGTGGTTGTGAAA Qy 21 SerGlyThrGluLy8ValLeuLeuIleAspSerArgBragArgLeuGluTyrAsnThrSer Qy 21 SerGlyThrGluLy8ValLeuLeuIleAspSerArgBragArgLeuGluTyrAsnThrSer Qy 21 SerGlyThrGluLy8ValLeuLeuIleAspSerArgBragArgLeuGluGlu AGTGGAACGGAAAAAGTGCTGCTAATTGTAATTGTTGTGGAATACAATACATCC Qy 41 HislleLeuGluAlaIleAsnIleAsnTly8SerLy8LeuMetLy8ArgArgLeuGlnGln 60	ORGANISM: Homo sapiens FEATURE: NAME/KEY: misc_feature LOCATION: 1, 5144, 5145 OTHER INFORMATION: n = A,T,C or G S-10-357-930-27145 lignment Scores:	PRIOR FILING DATE: 2000-07-18 PRIOR APPLICATION NUMBER: 60/255, PRIOR FILING DATE: 2000-12-13 NUMBER OF SEQ ID NOS: 62232 SOFTWARE: PastSEQ for Windows Ver SEQ ID NO 27145 LENGTH: 5145		TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREV TITLE OF INVENTION: HUMAN PROSTATE CANCER FILE REFERENCE: MRI-007BCN CURRENT APPLICATION NUMBER: US/10/357,930 CURRENT FILING DATE: 2003-02-04 PRIOR APPLICATION NUMBER: 09/785,276 PRIOR PILING DATE: 2003-02-16 PRIOR APPLICATION NUMBER: 60/183,319	GENERAL INFORMATION: APPLICANT: Schlegel. Robert APPLICANT: Endege, Wilson APPLICANT: Monahan, John TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KI	RESULT 28 US-10-357-930-27145 ; Sequence 27145, Application US/10357930 ; Publication No. US20040259086A1	Qy 660 lullellegluValSer 665 	Qy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	Qy 620 luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA 640	Db 2387 GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGAG
8 8 8 8 8 8 8 8	0	D	5 & B &	\$ \$ \$ \$	Qy Db	D Q D	, & B	. Q 8	? Q	Db
320 snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340	hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLyslleLysl	240 alleuValHisCysLeuAlaGlyIleSerArgSerAlaThrILeAlaTleAlaTlyrIleM 260 ,	helleprogluserHispheLeuargyalProValAsnAspSerPheCysGlutysIleL 	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuI1e 180		889 GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG 948 121 LeuAlaGlyGlyPheAlaGluPheSerArgCy8PheProGlyLeuCy8GluGlyLy8Ser 140	TGCAGTCAGAAGGTTGTAGTTTACGATCAAAGCTCCCCAAGATGTTGCCTCTCTCT	CysSerGlnLysValValValTyrAspGlnSerSerGlnAspValAlaSerLeuSerSer	AspLysValleulleThrGluLeulleGlnHisSerAlaLysHisLysValAsplleAsp	

```
RESULT 29

(WS-10-357-930-27149

(WS-10-357-930-27149)

Requence 27149, Application US/10357930

(Publication No. US20040259086A1

(Publication No. Replication Novel Genes, Compositions, Kits, And Methods For Title OF INVENTION: HUMAN PROSITIONS, KITS, AND METHODS FOR TITLE OF INVENTION: HUMAN PROSTATE CANCER

(PILE REFERENCE: MRI-007BCN

(CURRENT APPLICATION NUMBER: US/10/357,930

(PUBLICATION NUMBER: US/10/357,930

(PRIOR PILING DATE: 2003-02-04

PRIOR FILING DATE: 2003-02-16

(PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/189,862
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ACAGGTCACGGGAÁGAGCTGGGGAÁAGTGGGCAGTCAGTCTÁGCTTTTCGGGCÁGCÁTGG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    rgGln1ysProSerAspArgAlaAspSerArgArgSerTzpHisGluGluSerProPheg
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           creccracaecrecaecracicaecreces
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ccacadadrecticacacirretacretecercadecaretaddedaddddadrecadriaer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ACTCGGATATCTTGGCCCCCAGACCTCTACCCCTTCCCTGACCAGCAGCAGCTGGTATTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA 560
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ĠĊĊŢŢŶĊĊĀĊĊĀĠĊĊĀĠĊĀĠĊĀĊĊŢĊĀĊĠĀĀĠŢĊŢĠĊŢŶĠĠĊĊŢŶĀĀĠĠĠĊŢĠĠĊ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1\feelSerThrSerGlnGlnHi8LeuThrLy8SerAlaGl\fueuGl\fueuLy8Gl\fuTpH 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGCAGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 crearaadedaadeciaecarcecaadaadecrecadadacececadecerreadacaece
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   a caage tatéc cág tre tecé ce te tre tre de caa et a tre de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de ca de 
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                rcrccrcarcagaagargerrrggaaracracaaacerrecacracreggargggacea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TCTCTCTGGATATCAAATCAGTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                640
                                                                                                                                                                                                                                                                                     읁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2326
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     2146
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2086
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2026
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1846
                                                                                                            문
                                                                                                                                                          Ş
                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                 뭐
                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-06-09
PRIOR PILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-12-13
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR PILING DATE: 2000-12-13
SOFTWARE: FLING DATE: 2000-12-13
SOFTWARE: PASTSEQ FOR WINDOWS VERSION 4.
LENGTH: 5145
TYPE: DAA
ORGANISM: Homo sapiens
PRIORE: PASTURE: PASTUR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109 (1-665) x US-10-357-930-27149 (1-5145)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        i NAME/KEY: misc_feature
; LOCATION: 1, 5144, 5145
; OTHER INFORMATION: n = A,T,C
US-10-357-930-27149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       No.:
                                                                                                                                                                                                                                                                                                                              1009
                                                                                                                                                                                                                     1069
                                                       200
                                                                                                                                                             181
                                                                                                                                                                                                                                                                         161
                                                                                                                                                                                                                                                                                                                                                                                  141
                                                                                                                                                                                                                                                                                                                                                                                                                                          949
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   889
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            829
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     769
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              709
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                649
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      589
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 81
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heIlerroGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
                                                                                 gCAGCAGAATGGGATTGGTTATGTGTTAAATGCCAGCAA-TACCTGTCCAAAAGCCTGACT 1186
                                                                                                                                                                                          GAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT- 1127
                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle
                                                                                                                                                                                                                                                                                                                                                                                                                                                   LeuAlaGlyGlyPheAlaGluPheSerArgCysPheProGlyLeuCysGluGlyLysSer
                                                                                                                    -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspp 200
                                                                                                                                                                                                                                                                                                      acteracetécetácetáciáritetetácetracetracetetracetáciacatracecaáce
                                                                                                                                                                                                                                                                                                                                    ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr
                                                                                                                                                                                                                                                                                                                                                                                                                  CTTGCAGGTGGGTTTGCTGAGTTCTCTCGTTGTTTCCCTGGCCTCTGTGAAGGAAAATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            GACTGTTTTCTCACTGTACTTCTGGGTAAACTGGAGAAGAGCTTCAACTCTGTTCACCTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ĠĀĊĀĀĀĠĪĠĪĪĀĀĪĪĀĊĀĠĀĠĊĪĊĀĪĊĊĀĠĊĀĪĪĊĀĠĊĠĀĀĀĊĀĪĀĀĠĠĪĪĠĀĊĀĪŢĠĀŢ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ĊĀĊĀTTTTĠĠĀĀĠĊĊĀTTĀĀTĀTĊĀĀĊTĠĊŦĊĊĀĀĠĊŦTĀTĠĀĀĠĊĠĀĀĠĠŦŤĠĊĀĀĊĀĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGGAACGGAAAAAGTGCTGCTAATTGATAGCCGGCCATTTGTGGAATACAATACATCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SerGlyThrGluLysValLeuLeuIleAspSerArgProPheValGluTyrAsnThrSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5145
663
0
2
2
                                                                                                                                                                                                                                                                                                                                                              160
                                                                                                                                                                                                                                                     180
                                                                                                                                                                                                                                                                                                         1068
                                                                                                                                                                                                                                                                                                                                                                                                                  1008
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        888
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         100
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 828
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          768
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      708
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        40
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               648
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    20
```

Ş 밁

600

2387

밁 δ 밁 S 멍 Ś Ъ Ś 占

2327

580

2267

2207

2147

520

청 유 Ś 밁 Ş 뭐 Ś 8 Ş 밁

2027

480

1967

460

1907

440

1847

1787

420

밁 Ś 밁 Ş 밁 Ś

2567

2507

640

660

2447

```
1907
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1847
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1787
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1727
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1607
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1487
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1247
 2267
                                                                                                                                          2147
                                                                                                                                                                                                               2087
                                                                                                                                                                                                                                                                                     2027
                                                                                                                                                                                                                                                                                                                                                          1967
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1547
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1367
                                 560
                                                                                                                                                                                                                                                500
                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                           460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  320
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          240
lyLeuSerThrSerGlnGlnHi8LeuThrLy8SerAlaGlyLeuGlyLeuLly8GlyTrpH
                                                                                                                                                                                                                                                                                                        lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                 snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             heSerSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThrA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            heSerLeuAspIleLysSerValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        hrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       etLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              euProTrpLeuAspLysSerValAspPheIleGluLysAlaLysAlaSerAsnGlyCysV
                                                                             18SerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                 TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                  euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                          CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                            roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ATGAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TTCTAGTGCACTGTTTAGCTGGGATCTCCCGCCTCCGCCACCATCGCTATCGCCTACATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAAGCAAAAGCCTCCAATGGATGTG
                                                                                                                                         GCCTTTCCACCAGCCAGCAGCACCTCACGAAGTCTGCTGGCCTGGGCCTTAAGGGCTGGC
                                                                                                                                                                                                                                                                                    AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                ACAAGCTA'
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TCAGTGGGCTGCACCTGTCCGCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                       560
                                                                                                                                         2206
                                                                                                                                                                                                               2146
                                                                                                                                                                                                                                                                                     2086
                                                                                                                                                                                                                                                                                                                                                          2026
                                                                                                                                                                                                                                                                                                                                                                                                                              1966
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1906
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1846
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1666
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1606
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1546
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1486
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1426
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1366
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1306
 2326
                                                                      2266
                                                                                                                                                                                                                                                                                                                                                                                         480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1246
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
```

유 성

S

1 MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu

20

밁 S 밁 δ 밁 ð 문 5 밁 र् 문 ક 밁 S 밁 र् 밁 र् 문 S 밁 S 밁 ş 밁 ঠ 밁 S 밁 δ 밁 S 밁 S 밁

```
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITTLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,007
PRIOR APPLICATION NUMBER: 60/211,007
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR APPLICATION NUMBER: 60/215,007
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
                                                                                                                                                          ; ORGANISM: Homo sapiens ; FEATURE; NAME/KEY: misc feature; LOCATION: 1, 5144, 5145; OTHER INFORMATION: n = A US-10-357-930-28675
                                Query
DB:
                                               Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         RESULT 30
US-10-357-930-28675
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         유
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   닭
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                S
US-10-029-345A-109 (1-665) x US-10-357-930-28675
                                                                                                                                                                                                                                                                        NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windov
SEQ ID NO 28675
LENGTH: 5145
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 28675, Application US/10357930 Publication No. US20040259086A1
                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2567
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2507
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2387
                                                                                                                             Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         580
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAATCATTGAGGTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             luIleIleGluValSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         GGCAGAAGCCAAGTGACAGAGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCCTTTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         erAlaTyrSerCysSerGlnLeuProThrCysGlyAspGlnValTyrSerValArgArgA
                                                                                                                                                                                                                                                                                                            for Windows Version
                                                                                                                                                                                              5145
                              0
472.00
99.40%
99.40%
70.98%
                                                                                                                                                                             A,T,
                                                                                                                                                                              'n
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         665
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2583
                                                                                                                                                                              ç
                                                                                                                                                                                G
                                             Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                              4.0
 (1-5145)
                              5145
663
2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2566
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2506
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2446
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2386
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           660
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           640
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        620
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ဝူ
```

음 성 음 성

밁 Ş

B 8 B B B

320 snGluprovalProAlaValSerGluGlyGlnLysSerGluThrDroLeuSerProP 340	### shallow the standard of th				200 helleprogluserHispheLeuArgValProValAsnAspSerPheCysGluLysIleL 220 	161 ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180 	0—H	101 AspCysPheLeuThrValLeuLeuGlyLysLeuGluLysSerPheAsnSerValHisLeu 120 	61 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80 	41 HislleLeuGluAlaIleAsnIleAsnCysScrLysLeuMetLysArgArgLeuGlnGln 60	589 ATGGCCCATGAGATGATTGGAACTCAAATTGTTACTGAGAGGTTGGTGGCTCTGCTGGAA 648 21 SerGlyThrGluLysValLeuLeuIleAspSerArgProPhéValGluTyrAsnThrSer 40
US-10-072-012-255 Sequence 255, Application US/10072012 Publication No. US20040033493A1 GENERAL INFORMATION: APPLICANT: Thernev, Velizar APPLICANT: Spytek, Kimberly APPLICANT: Patturajan, Meera APPLICANT: Shimkets, Richard APPLICANT: Shimkets, Richard APPLICANT: Shimkets, Richard APPLICANT: Shimkets, Richard APPLICANT: Gangolli, Esha		Qy 640 snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG 660	nPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA	620				480	4 4		Qy 380 euSerGlyLeuHisLeuSerAlaAspArgLeuGluAspSerAsnLysLeuLysArgSerP 400

음 성

음 성 음

8 8 8

음 성 DЬ Ş DЬ Ś 망 Ş 멍 Ş 밁 Ş 밁 Ş В Ş 문 Ş

Qy 231 GluLysalaLysalaSerAsnGlyCysValLeuValHisCysLeuAlaGlyTleSerArg 250 [Pred. No.: 0 Length: 2200 Score: 408.00 Matches: 435 Percent Similarity: 99.32% Conservative: 0 Best Local Similarity: 99.32% Mismatches: 0 Query Match: 61.35% Indels: 3 DB: 17 Gaps: 0 US-10-029-345A-109 (1-665) x US-10-072-012-255 (1-2200)	 (B: PatentIn Ver. 2.1 (0 255 (1 2200 (DNA (012-255 (SCOres: 	PRIOR APPLICATION NUMBER: 60/267,057 PRIOR FILING DATE: 2001-02-07 PRIOR PILING DATE: 2001-02-07 PRIOR FILING DATE: 2001-02-07 PRIOR PILING DATE: 2001-02-07 PRIOR APPLICATION NUMBER: 60/267,459 PRIOR FILING DATE: 2001-02-08 PRIOR FILING DATE: 2001-02-08 Remaining Prior Application data removed - See File Wrapper or PALM. NUMBER OF SEO ID NOS: 1391		CURRENT FILING DATE: 2002-01-31 PRIOR APPLICATION NUMBER: 60/265,102 PRIOR PILING DATE: 2001-01-30 PRIOR PILING DATE: 2001-01-31 VI: Lepley, De VI: Rieger, Da VI: Burgess, C FINVENTION: Pr FERENCE: 21402- APPLICATION NU	Colman, Stevenia Colman, Stevenia Colman, Stevenia Wolenc, Adam R. Pena, Carol E. Pena, Carol E. Pentak, Katarzy Grosse, William Alsobrook II, Jo	; APPLICANT: Padigaru, Muralidhara ; APPLICANT: Anderson, David W. ; APPLICANT: Rastelli, Luca ; APPLICANT: Miller, Charles E. ; APPLICANT: Gerlach, Valerie ; APPLICANT: Taupier Jr, Raymond J. APPLICANT: Gusev Vladimir v	
8	9 Q B Q	B & B &	B & B &	B 8 B	S B S B	\$ \$ \$	B 8 B 8	8
590 CysGyAspGinvallyrServalArgArgGinuysProSerAspArgArgArgArgArgArgGinuysProSerAspArgArgArgArgArgArgArgArgArgArgArgArgArgA	ThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHiePheTyrSerAla	510 GluAspAsnTyrHisThrSerPheLeuPheGlyLeuSerThrSerGlnGlnHisLeuThr 529	470 LysLeuglnThrAlaArgProSerAspSerGlnSerLysArgLeuHlsSerValArgThr 489		1273 CTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCAGTTTCATAT 1332 410 SerAlaSerMetAlaAlaSerLeuHisGlyPheSerSerSluAspAlaLeuGluTyr 429	370 LeuLeudluAspSerProLeuValGlnAlaLeuSerGlyLeuHisLeuSerAlaAspArg 389	1093 GGACAGAAAAGGCCGTGCATCCGCCAGCGTGCCCAGCGTGCCCAGCGTGCAGCAGCCGTGCAGCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTGCCCAGCCGTGCCCAGCCGTGCCAGCCGTGCCAGCCGTGCCAGCCGTCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTGCCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCCAGCCGTCCCAGCCGTCCAGCCGTCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTCCAGCCGTCCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCCAGCCGTCCCAGCCGTCCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAGCCGTCCAACCGTCCAAGCGTCCCAAGCCGTCCCAAGCCGTCCAAGCGTCCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCCAAGCCGTCCAAGCCGTCCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCCAAGCCGTCCAAGCCGTCCCAAGCCGTCCAAGCAAAAAAAA	

```
APPLICANT: Technev, Velizar
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Spytek, Kimberly
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Shimkets, Richard
APPLICANT: Gangolli, Bsha
APPLICANT: Anderson, David W.
APPLICANT: Anderson, David W.
APPLICANT: Anderson, David W.
APPLICANT: Miller, Charles E.
APPLICANT: Anderson, David W.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Gusev, Vladimir Y.
APPLICANT: House, Kararzyna
APPLICANT: Gusev, Vladimir Y.
APPLICANT: Alsobrook II, John P.
APPLICANT: Alsobrook II, John P.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Lepley, Denise M.
APPLICANT: Alsobrook II, John P.
APPLICANT: NUMER: 180/1072,012
FILE REFERENCE: 21402-58

CURRENT FILING DATE: 2002-01-31

PRIOR APPLICATION NUMBER: 60/265,102
FRIOR APPLICATION NUMBER: 60/265,102
FRIOR APPLICATION NUMBER: 60/265,102
FRIOR APPLICATION NUMBER: 60/265,517
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,412
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/265,767
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/266,975
FRIOR APPLICATION NUMBER: 60/
                                                       Ś
                                                                                                                                                                      Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                  US-10-029-345A-109
                                                                                                                                                                                                                                                                                       Alignment Scores:
                                                                                                                                                                                                                                                                                                                                       ; ORGANISM: Homo
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                             SOFTWARE: PatentIn v
SEQ ID NO 257
LENGTH: 2071
TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RESULT 32
US-10-072-012-257
                                                                                                                                                                                                                                                                                                                                                                                                                                                                Remaining Prior Application data removed - See File Wrapper or PALM NUMBER OF SEQ ID NOS: 1391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 257, Applica Publication No. US200 GENERAL INFORMATION:
                              MetAlaHisGluMetIleGlyThrGlnIleValThrGluArgLeuValAlaLeuLeuGlu 20
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Application US/10072012
                                                                                (1-665) x US-10-072-012-257 (1-2071)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        US20040033493A1
                                                                                                                                     6.8e-295
304.00
98.65%
98.65%
45.71%
                                                                                                                                                            Conservative: Mismatches: Indels:
                                                                                                                                                                                                                                Length:
Matches:
                                                                                               밁
                                                                                                                                S
                                                                                                                                                                                문
                                                                                                                                                                                                                             S
                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                  문
                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          吊
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        8
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                뮍
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     뭐
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                     1019
                                                                                                                                                                                                                                                                                     959
                                                                                                                                                                                                                                                                                                                                  300
                                                                                                                                                                                                                                                                                                                                                                                  668
                                                                                                                                                                                                                                                                                                                                                                                                                             280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        779
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  719
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             659
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        541
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                141
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             421
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          361
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     301
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              241 GACAAAGTGTTAATTACAGAGCTCATCCAGCATTCAGCGAAACATAAGGTTGACATTGAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         181 CACATTTTGGAAGCCATTAATATCAACTGCTCCAAGCTTATGAAGCGAAGGTTGCAACAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   81
alProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuValGlnAlaL 380
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                61
                                                                      snGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProP 340
                                                                                                                                                                                                                                                                                            snGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProA 320
                                                                                                                                                                                                                                                                                                                                                                                          roCysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerV 360
                                                                                                                                                                                                                                                                 CTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                         rreradigeaeigittadendedatereeegeteedeeaeeatederategetategeetaeatea
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    alLeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TGCCGTGGTTGGACAAATCAGTAGATTTCATTGAGAAAGCCAAAAGCCTCCAATGGATGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               TTATCCCCGAGTCTCATTTCCTGCGTGTGCCTGTGAATGACAGCTTTTGTGAGAAAATTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       heIleProGluSerHisPheLeuArgValProValAsnAspSerPheCysGluLysIleL 220
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      GCAGCAGAATGGGATTGGTTATGTGTGAAATGCCAGCAA-TACCTGTCCAAAGCCTGACT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -GlnGlnAsnGlyIleGlyTyrValLeuAsnAlaSerTyr-ThrCysProLysProAspP
|||||||||||||||||||||||||||||||
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CGAATTCTTCCCAATCTTTATCTTGGCTGCCAGCGAGATGTCCTCAACAAGGAGCTGAT-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ArgIleLeuProAsnLeuTyrLeuGlyCysGlnArgAspValLeuAsnLysGluLeuIle 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ThrLeuValProThrCysIleSerGlnProCysLeuProValAlaAsnIleGlyProThr 160
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ACTCTAGTCCCTACCTGCATTCTCAGCCTTGCTTACCTGTTGCCAACATTGGGCCAACC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         criscaserses rices en contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra de la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la contra del la
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          LeuAlaGlyGlyPheAlaGluPheSexArgCyBPheProGlyLeuCy8GluGlyLy8Ser
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ĠĀĊŦĠŦŦŦŶĊŦĊĀĊŦĠŦĀĊŦŦĊŦĠĠĠŦĀĀĀĊŦĠĠĀĠĀĀĠĀĠĊŦŦĊĀĀĊŦĊŦĠŦŢĊĀĊĊŦĠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 AspLysValLeuIleThrGluLeuIleGlnHisSerAlaLysHisLysValAspIleAsp 80
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1078
                                                                                                                                                                                                                                                                   1018
                                                                                                                                                                                                                                                                                                                                                                                                              300
                                                                                                                                                                                                                                                                                                                                                              958
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              240
                                                                                                                                                                                                                                                                                                                                                                                                                                                           898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         280
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        838
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   778
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         658
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      200
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      140
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    360
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 120
```

```
RESULT 33
US-10-108-260A-2429
Sequence 2429, Appl
Publication No. US;
Hublication No. US;
APPLICANT: HELIX FILLA OF INVENTION;
FILE REFERENCE: HI
CURRENT APPLICATIC
CURRENT FILING DAY
NUMBER OF SEQ ID N
                                                                                                                                                                                                                                                                                                                                                                                                                             В
                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                              ð
                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                        δ
                                                                                                                                                                                                                                                                                                                                                                                                   ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                  δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ঠ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              र्
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ঠ
                                                                                                                               밁
                                                                                                                                          ક
                                                                                                                                                                밁
                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   S
Sequence 2429, Application US/10108260A
Publication No. US20040005560A1
GENERAL INFORMATION:
APPLICANT: HELIX RESEARCH INSTITUTE
TITLE OF INVENTION: No. US20040005560A1e1 full
FILE REFERENCE: H1-A0106
CURRENT APPLICATION NUMBER: US/10/108,260A
CURRENT FILING DATE: 2002-03-27
NUMBER OF SEQ ID NOS: 5458
                                                                                                                               2030
                                                                                                                                                                       1970
                                                                                                                                                                                                               1910
                                                                                                                                                                                                                                                         1850
                                                                                                                                                                                                                                                                                                   1790
                                                                                                                                                                                                                                                                                                                                           1730
                                                                                                                                                                                                                                                                                                                                                                                      1670
                                                                                                                                                                                                                                                                                                                                                                                                                               1610
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1490
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1430
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1310
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1190
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1133
                                                                                                                                                  660
                                                                                                                                                                                           640
                                                                                                                                                                                                                                    620
                                                                                                                                                                                                                                                                             600
                                                                                                                                                                                                                                                                                                                      980
                                                                                                                                                                                                                                                                                                                                                                560
                                                                                                                                                                                                                                                                                                                                                                                                          540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               rgGlnLysProSerAspArgAlaAspSerArgArgSerTrpHisGluGluSerProPheG
                                                                                                                                                                                                                                                                                                  heSerSerGluAspAlaLeuGluTyrTyrLysProSerThrThrLeuAspGlyThra
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       luIleIleGluValSer
                                                                                                                                                                                   snArgSerArgGluGluLeuGlyLysValGlySerGlnSerSerPheSerGlySerMetG
                                                                                                                                                                                                              ANAAGCAGTTTAAACGCAGAAGCTGCCAAATGGAATTTTGGAGAGAGCATCATGTCAGAGA
                                                                                                                                                                                                                          luLysGlnPheLysArgArgSerCysGlnMetGluPheGlyGluSerIleMetSerGluA
                                                                                                                                                                                                                                                                                                                                                        laThrGluSerSerHisPheTyrSerAlaSerAlaIleTyrGlyGlySerAlaSerTyrS
                                                                                                                                                                                                                                                                                                                                                                                     isSerAspIleLeuAlaProGlnThrSerThrProSerLeuThrSerSerTrpTyrPheA
                                                                                                                                                                                                                                                                                                                                                                                                                                         lyLeuSerThrSerGlnGlnHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    euSerProLeuHisArgSerGlySerValGluAspAsnTyrHisThrSerPheLeuPheG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             lnSerLysArgLeuHisSerValArgThrSerSerSerGlyThrAlaGlnArgSerLeuL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       roAspLysGluGluAlaSerIleProLysLysLeuGlnThrAlaArgProSerAspSerG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    snLysLeuCysGlnPheSerProValGlnGluLeuSerGluGlnThrProGluThrSerP
                                                                                                                               AAATCATTGAGGTCTCC
                                                                                                                                                                       CCACAGAGTCCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TATCTCCACTGCATCGAAGTGGGAGCGTGGAGGACAATTACCACCACCAGCTTCCTTTTCG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AGAGCAAGCGATTGCATTCGGTCAGAACCAGCAGCAGTGGCACCGCCCAGAGGTCCCTTT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CTGATAAGGAGGAAGCCAGCATCCCCAAGAAGCTGCAGACCGCCAGGCCTTCAGACAGCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           --,CC-AGCGTACCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTACAGGCGC
                                                                                                                               2046
                                                                                                                                                 665
                                            length
                                            CDNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         460
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1369
                                                                                                                                                                       2029
                                                                                                                                                                                                                1969
                                                                                                                                                                                                                                                         1909
                                                                                                                                                                                                                                                                                                   1849
                                                                                                                                                                                                                                                                                                                                             1789
                                                                                                                                                                                                                                                                                                                                                                                       1729
                                                                                                                                                                                                                                                                                                                                                                                                                               1669
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1609
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1549
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1489
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1249
                                                                                                                                                                                           660
                                                                                                                                                                                                                                    640
                                                                                                                                                                                                                                                                             620
                                                                                                                                                                                                                                                                                                                        600
                                                                                                                                                                                                                                                                                                                                                                 580
                                                                                                                                                                                                                                                                                                                                                                                                          560
                                                                                                                                                                                                                                                                                                                                                                                                                                                    540
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             520
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   440
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             420
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                            Ś
                                                                                                                                                                                                                                                                                                                                                                                                                S
                                                                                                                                                                                                                                                                                                                                                                                                                                         밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                       S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            맑
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           δ
                          5
                                                밁
                                                                  5
                                                                                       片
                                                                                                             δ
                                                                                                                                      밁
                                                                                                                                                      5
                                                                                                                                                                           Б
                                                                                                                                                                                                S
                                                                                                                                                                                                                         문
                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                  밁
                                                                                                                                                                                                                                                                                   δ
                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                      S
                                                                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                문
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; TYPE: DNA
; ORGANISM: Homo
US-10-108-260A-2429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               US-10-029-345A-109 (1-665) x US-10-108-260A-2429
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin
SEQ ID NO 2429
LENGTH: 1916
                                                                                                                                                                                                                                                                    561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      142
                                                                                                108
                                                                                                                  909
                                                                                                                                                           586
                                                                                                                                                                                 681
                                                                                                                                                                                                     966
                                                                                                                                                                                                                          621
                                                                                                                                                                                                                                             546
                                                                                                                                                                                                                                                                                                             502
                                                                                                                                                                                                                                                                                                                                 507
                                                                                                                                                                                                                                                                                                                                                      442
                                                                                                                                                                                                                                                                                                                                                                           487
                                                                                                                                                                                                                                                                                                                                                                                                 382
                                                                                                                                                                                                                                                                                                                                                                                                                    467
                                                                                                                                                                                                                                                                                                                                                                                                                                           322
                                                                                                                                                                                                                                                                                                                                                                                                                                                              447
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       427
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 407
                                                                                                                                                                                                                                                                                                            GlySerValGluAspAsnTyrHisThrSerPheLeuPheGlyLeuSerThr-SerGlnGl
                                                                                                                                                                                                                                                                                                                                                      uGlyLysValGlySerGlnSerSerPheSerGlySerMetGluIleIleGluValSer 665
                                                                                                                                                                                                                          oGlnThrSerThrProSerLeuThrSerSerTrpTyrPheAlaThrGluSerSerHisPh
                                                                                                                                                                                                                                                                                                                                                                                               GCAGACAGGCTGGAAGACAGCAATAAGCTCAAGCGTTCCTTCTCTCTGGATATCAAATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AlaAspArgLeuGluAspSerAsnLysLeuLysArgSerPheSerLeuAspIleLysSer
              GGGGAAAGTGGGCAGT
                                                                gSerCy8GlnMetGluPheGlyGluSerIleMetSerGluA8nArgSerArgGluGluLe
                                                                                             AGCTGACTCGCGGCGGAGCTGGCATGAAGAGAGCCCCTTTGAAAAAGCAGTTTAAAACGCAG
                                                                                                          GAlaAspSerArgArgSerTrpHisGluGluSerProPheGluLysGlnPheLysArgAr
                                                                                                                                         GCTGCCCACTTGCGGAGACCAAGTCTATTCTGTGCGCAGGCGGCAGAAGCCAAGTGACAG
                                                                                                                                                     nLeuProThrCysGlyAspGlnValTyrSerValArgArgArgGlnLysProSerAspAr
                                                                                                                                                                               nHisLeuThrLysSerAlaGlyLeuGlyLeuLysGlyTrpHisSerAspIleLeuAlaPr
                                                                                                                                                                                                                                                                                                                                                                                                                                           CCTGTTCAGGAACTATCGGAGCAGACTCCCGAAACCAGTCCTGATAAGGAGGAAGCCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                      ProValGlnGluLeuSerGluGlnThrProGluThrSerProAspLysGluGluAlaSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TTGGAATACTACAAACCTTCCACTACTCTGGATGGGACCAACAAGCTATGCCAGTTCTCC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LeuGluTyrTyrLysProSerThrThrLeuAspGlyThrAsnLysLeuCysGlnPheSer
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTTTCATATTCAGCCAGCATGGCAGCATCCTTACATGGCTTCTCCTCATCAGAAGATGCT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ValSerTyrSerAlaSerMetAlaAlaSerLeuHisGlyPheSerSerSerGluAspAla
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 варіепв
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.86e-1
178.00
99.29%
99.29%
99.29%
26.77%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        .86e-168
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Length:
Matches:
Conservative:
Mismatches:
Indels:
Gaps:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                (1-1916)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1916
278
0
1
1
2
```

646 860 626 800 586

606 740 566

620 546

680

526

501 506 441 486

381 466 321 446 261

```
GENERAL INFORMATION:
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THER.
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: US/10/357,930
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-03-16
PRIOR APPLICATION NUMBER: 60/189,862
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR FILING DATE: 2000-07-18
PRIOR PRIOR FILING DATE: 2000-07-18
PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR PRIOR P
                                                                                   문
                                                                                                                       Ś
                                                                                                                                                                            밁
                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                Ś
                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                              Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Ş
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           US-10-029-345A-109 (1-665) x US-10-357-930-10717 (1-425)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; ORGANISM: Homo sapiens US-10-357-930-10717
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 34
US-10-357-930-10717/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Sequence 10717, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                         340
                              360
                                                                              123
                                                                                                                                                                            183
                                                                                                                                                                                                                          320
                                                                                                                                                                                                                                                                        243
                                                                                                                                                                                                                                                                                                                     300
                                                                                                                                                                                                                                                                                                                                                                      303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    363
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        280
                                                                                        ValProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal 377
                                                                                                                                                                                    AsnGluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerPro
                                                                                                                                                        AATGAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCA
                                                                                                                                                                                                                                                      AACCAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGGAAGCCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              MetLysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgPro
                                                                                                                                                                                                                                                                                  AsnGlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysPro
                                                                                                                                                                                                                                                                                                                                               ACTATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAG
                                                                                                                                                                                                                                                                                                                                                                             ThrIleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLys
                                                                                                                                                                                                                                                                                                                                                                                                                                             1.18e-128
138.00
100.00%
100.00%
20.75%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            425
138
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        FOR
THERAPY
                                                                                                          359
                                                                                                                                                        124
                                                                                                                                                                                                      339
                                                                                                                                                                                                                                                                                                 319
                                                          64
                                                                                                                                                                                                                                                      184
                                                                                                                                                                                                                                                                                                                                                 244
                                                                                                                                                                                                                                                                                                                                                                                               299
                                                                                                                                                                                                                                                                                                                                                                                                                                               304
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             279
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             364
```

```
APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
ITILE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE OF INVENTION: LIDENTIFICATION, ASSESSMENT, PREVENTION, AND THERN
ITILE OF INVENTION: HUMAN PROSTATE CANCER
ITILE REFERENCE: MRI-007BCN
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR FILING DATE: 2000-02-17
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/207,454
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-05-05
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-01-13
NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version 4.0
INCANTS: Human Series.
                                                                                                δ
                                                                                                                                   밁
                                                                                                                                                                          Ś
                                                                                                                                                                                                                   밁
                                                                                                                                                                                                                                                  Ş
                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                         Ś
                                                                                                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                                                                                                                                                                                                                                                                                                                                        片
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  US-10-029-345A-109 (1-665) x US-10-357-930-31909 (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-357-930-31909
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RESULT 35
US-10-357-930-31909/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; Sequence 31909, Application US/10357930
; Publication No. US20040259086A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ORGANISM: Homo sapiens
                                                                                                      341
                                                                                                                                           225
                                                                                                                                                                              321
                                                                                                                                                                                                                   285
                                                                                                                                                                                                                                                    301
                                                                                                                                                                                                                                                                                        345
                                                                                                                                                                                                                                                                                                                                                                405
                                                                                                                                                                                                                                                                                                                             281
                                                                                                                                                                                                                                                                                                                                                                        261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                                                                        465 CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                                                                                                                                                                                                                                                                                                                                                                                                              241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet 260
ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal
                                                        rérecceacreraceracercaeaeseaesaesaesaesaeseccerrecareceaesaesere
                                                                                                                                                     GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro|
                                                                                                                                                                                                                          | GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                               CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                               GAACCTGTCCCTGCTGTCTCAGAGGGTGGACAGAAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                     CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                             ATATOTOCAAACTTOAATTTTOTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAAC
                                                                                                                                                                                                                                                                                                  1.3e-127
137.00
100.00%
100.00%
20.60%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                THERAPY OF
                                                          106
                                                                                           360
                                                                                                                                                                340
                                                                                                                               166
                                                                                                                                                                                                                                                                             286
                                                                                                                                                                                                                                                                                                                300
                                                                                                                                                                                                                                                                                                                                                                                      280
                                                                                                                                                                                                     226
                                                                                                                                                                                                                                        320
                                                                                                                                                                                                                                                                                                                                                     346
```

밁

CCCAGCGTGCCCAGCGTGCAGCCGTTGGTTAGAGGACAGCCCGCTGGTA 55

```
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
IITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
ITITLE OF INVENTION: IDENTIFICATION, ASSESSMENT, PREVENTION, AND THEF
ITITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CURRENT APPLICATION NUMBER: US/10/357,930
CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR APPLICATION NUMBER: 60/2107,454
PRIOR PILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-05-07-18
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR PILING DATE: 2000-07-18
PRIOR PILING DATE: 2000-07-18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          RESULT 36
US-10-357-930-40868/c
; Sequence 40868, Application US/10357930
; Publication No. US20040259086A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                          ঠ
                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                           ફ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       δ
                                        밁
                                                                            S
                                                                                                                          밁
                                                                                                                                                            ঠ
                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                       밁
                                                                                                                                                                                                                                                                                                                           á
                                                                                                                                                                                                                                                                                                                                                                                                                                                     밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-029-345A-109 (1-665) x US-10-357-930-40868 (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Score:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Alignment Scores
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; ORGANISM: Homo sapiens
US-10-357-930-40868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 62232
SOFTWARE: FastSEQ for Windows Version
SEQ ID NO 40868
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PRIOR APPLICATION I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Schlegel. Robert
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               No:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: 60/255,281 FILING DATE: 2000-12-13
                                        165
                                                                              341
                                                                                                                          225
                                                                                                                                                              321
                                                                                                                                                                                                      285
                                                                                                                                                                                                                                              301
                                                                                                                                                                                                                                                                                       345 ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAAGTTAAGAAC
                                                                                                                                                                                                                                                                                                                               281
                                                                                                                                                                                                                                                                                                                                                                       405
                                                                                                                                                                                                                                                                                                                                                                                                                                                   465
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
361 ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal 377
                                                                                                                                                                                                                                                                                                                                                                                                           261 LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                 GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                      CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                   CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATG
                                                               CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal
                                                                                                                        GAACCTGTCCCTGCTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCCTCAGTCCACCC
                                                                                                                                                                                                                                                                                                                  IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                        TGTGCCGACTCTGCTACCTCAGAGGCAGCAGGACAAAGGCCCGTGCATCCCGCCAGCGTG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.3e-127
137.00
100.00%
100.00%
20.60%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         THERAPY
                                                                                360
                                        106
                                                                                                                        166
                                                                                                                                                              340
                                                                                                                                                                                                      226
                                                                                                                                                                                                                                              320
                                                                                                                                                                                                                                                                                       286
                                                                                                                                                                                                                                                                                                                             300
                                                                                                                                                                                                                                                                                                                                                                     346
                                                                                                                                                                                                                                                                                                                                                                                                           280
                                                                                                                                                                                                                                                                                                                                                                                                                                                   406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ę,
```

```
S
                                                                                                                                                                                                                                                                                                      멼
                                                                       문
                                                                                                         δ
                                                                                                                                                   묽
                                                                                                                                                                                  8
                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                            S
                                                                                                                                                                                                                                                                                                                                          á
                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                 Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                         US-10-029-345A-109 (1-665) x US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Percent Similarity:
Best Local Similarity:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RESULT 37
US-10-357-930-41017/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Alignment Scores:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      US-10-357-930-41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PRIOR APPLICATION NUMBER: 60/207,454
PRIOR FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/211,314
PRIOR FILING DATE: 2000-06-09
PRIOR APPLICATION NUMBER: 60/219,007
PRIOR FILING DATE: 2000-07-18
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR APPLICATION NUMBER: 60/255,281
PRIOR FILING DATE: 2000-12-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        CURRENT FILING DATE: 2003-02-04
PRIOR APPLICATION NUMBER: 09/785,276
PRIOR FILING DATE: 2003-02-16
PRIOR APPLICATION NUMBER: 60/183,319
PRIOR FILING DATE: 2000-02-17
PRIOR PPLICATION NUMBER: 60/189,862
PRIOR FILING DATE: 2000-03-16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 41017, Application US/10357930 Publication No. US20040259086A1 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SOFTWARE: FastSEQ for Windows Version SEQ ID NO 41017
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: Schlegel. Robert
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Endege, Wilson
APPLICANT: Monahan, John
TITLE OF INVENTION: NOVEL GENES, COMPOSITIONS, KITS, AND METHODS FOR
TITLE OF INVENTION: LUBANTIFICATION, ASSESSMENT, PREVENTION, AND THERAPY OF
TITLE OF INVENTION: HUMAN PROSTATE CANCER
FILE REFERENCE: MRI-007BCN
CUCRENT APPLICATION NUMBER: US/10/357,930
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     NUMBER OF SEQ ID NOS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Homo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TYPE: DNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            LENGTH: 467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              No.:
165
                                 341
                                                                                                             321
                                                                                                                                                   285
                                                                                                                                                                                      301
                                                                                                                                                                                                                              345
                                                                                                                                                                                                                                                                                                        405
                                                                                                                                                                                                                                                                                                                                                                                 465
                                                                                                                                                                                                                                                                  281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      105 CCCAGCGTGCCCAGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTA
                                                                                                                                                                                                                                                                                                                                                                                                                     241 LeuValHisCysLeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMet
                   CysAlaAspSerAlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerVal 360
                                                                                             GluProValProAlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProPro
                                                                                                                                                                                                                                                                                                                              LysArgMetAspMetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThr
                                                                                                                                                                                                                                                                                                                                                                               CTAGTGCACTGTTTAGCTGGGATCTCCCGCTCCGCCACCATCGCTATCGCCTACATCATC
                                                                                                                                                                         GlnThrGlyAlaSerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsn
                                                                                                                                                                                                                                                                                                        CAGACTGGAGCATCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAT
                                                                                                                                                                                                                              ATATCTCCAAACTTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGAATTAAGAAC
                                                                                                                                                                                                                                                    IleSerProAsnPheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.3e-127
137.00
100.00%
100.00%
20.60%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           (1-467)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               467
137
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        55
                                                                                                             340
                                                                                                                                                   226
                                                                                                                                                                                        320
                                                                                                                                                                                                                              286
                                                                                                                                                                                                                                                                    300
                                                                                                                                                                                                                                                                                                      346
                                                                                                                                                                                                                                                                                                                                            280
                                                                                                                                                                                                                                                                                                                                                                               406
                                                                                                                                                                                                                                                                                                                                                                                                                     260
                                                                         166
```

```
Sequence 10898, Application US/10357930

Publication No. US20040259086A1

GENERAL INFORMATION:

APPLICANT: Schlegel. Robert

APPLICANT: Endege, Wilson

APPLICANT: Monahan, John

ITILE OF INVENTION: IDENTIFICATION, KITS, AND METHODS FOR

ITILE OF INVENTION: HUMAN PROSTATE CANCER

ITILE OF INVENTION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/213,314

PRIOR APPLICATION NUMBER: 60/21,314

PRIOR FILING DATE: 2000-05-25

PRIOR APPLICATION NUMBER: 60/21,314

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/215,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR APPLICATION NUMBER: 60/255,281

PRIOR SECONDATE: 2000-12-13

PRIOR SECONDATE: 2000-12-13
                                      Ś
                                                                                                                     S
                                                                                                                                                                    밁
                                                                                                                                                                                                        Ş
                                                                                                                                                                                                                                                      뮍
                                                                                                                                                                                                                                                                                              Ś
                                                                                                                                                                                                                                                                                                                                           문
                                                                                                                                                                                                                                                                                                                                                                             Ś
                                                                                                                                                                                                                                                                                                                                                                                                                               밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-10-029-345A-109 (1-665) x US-10-357-930-10898 (1-408)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Percent Similarity:
Best Local Similarity:
Query Match:
DB:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                US-10-357-930-10898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      RESULT 38
US-10-357-930-10898/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SOFTWARE: FastSEQ for Windows Version 4.0 SEQ ID NO 10898
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 62232
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               LENGTH: 408
108
                                      345
                                                                                 168
                                                                                                                         325
                                                                                                                                                                    228
                                                                                                                                                                                                             305
                                                                                                                                                                                                                                                        288
                                                                                                                                                                                                                                                                                                 285
                                                                                                                                                                                                                                                                                                                                           348
                                                                                                                                                                                                                                                                                                                                                         265 MetSerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSerProAsn
                                                                                                                                                                                                                                                                                                                                                                                                                                          245 LeuAlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLysArgMetAsp
                                                                                            AlaValSerGluGlyGlyGlnLysSerGluThrProLeuSerProProCysAlaAspSer
               AlaThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerValProSerValPro 364
                                                                                                                                                     TCAGGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAATGAACCTGTCCCT
                                                                                                                                                                             SerGlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValPro
                                                                                                                                                                                                                                        TTCAATTTTCTGGGCCAACTCCTGGACTATGAGAAGAAGATTAAGAACCAGACTGGAGCA
                                                                                                                                                                                                                                                                   PheAsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsnGlnπhrGlyAla 304
                                                                                                                                                                                                                                                                                                                            ATGTCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAGACCTACTATATCTCCAAAC
                                                                                                                                                                                                                                                                                                                                                                                                               TTAGCTGGGATCTCCCGCCCACCATCGCTATCGCCTACATCATGAAGAGGATGGAC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ProSerValProSerValGlnProSerLeuLeuGluAspSerProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.21e-123
133.00
100.00%
100.00%
20.00%
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Length:
Matches:
Conservative:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                0000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            55
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 FOR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          THERAPY OF
                                                                                                          344
                                                                                                                                                     169
                                                                   109
                                                                                                                                                                                               324
                                                                                                                                                                                                                                          229
                                                                                                                                                                                                                                                                                                                            289
                                                                                                                                                                                                                                                                                                                                                                       284
                                                                                                                                                                                                                                                                                                                                                                                                               349
                                                                                                                                                                                                                                                                                                                                                                                                                                                          264
```

```
Sequence 32077, Application US/10357930

Publication No. US20040259086A1

REPLICANT: Schlegel. Robert

APPLICANT: Monahan, John

TITLE OF INVENTION: HUMAN PROSTATE CANCER

FITLE OF INVENTION: HUMAN PROSTATE CANCER

CURRENT APPLICATION NUMBER: US/10/357,930

CURRENT APPLICATION NUMBER: 09/785,276

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/183,319

PRIOR APPLICATION NUMBER: 60/193,862

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR APPLICATION NUMBER: 60/207,454

PRIOR FILING DATE: 2000-05-25

PRIOR FILING DATE: 2000-06-09

PRIOR FILING DATE: 2000-06-09

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-07-18

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR FILING DATE: 2000-07-18

PRIOR APPLICATION NUMBER: 60/211,314

PRIOR APPLICATION NUMBER: 60/212,007

PRIOR APPLICATION NUMBER: 60/212,007

PRIOR APPLICATION NUMBER: 60/212,007

PRIOR APPLICATION NUMBER: 60/2212,007

PRIOR APPLICATION NUMBER: 60/2212,007
                                                                                        맑
                                                                                                                             Ś
                                                                                                                                                                                밁
                                                                                                                                                                                                                             5
                                                                                                                                                                                                                                                                                밁
                                                                                                                                                                                                                                                                                                                     S
                                                                                                                                                                                                                                                                                                                                                                             밁
                                                                                                                                                                                                                                                                                                                                                                                                                          Ś
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          US-10-029-345A-109 (1-665) x US-10-357-930-32077 (1-438)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Percent Similarity:
Best Local Similarity:
Query Match:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          밁
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     LENGTH: 438
; TYPE: DNA
; ORGANISM: Homo sapiens
US-10-357-930-32077
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Alignment Scores: Pred. No.:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  RESULT 39
US-10-357-930-32077/c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              F
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               δ
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         SOFTWARE: FastSEQ for Windows Version SEQ ID NO 32077
                                        346
                                                                                        197
                                                                                                                                  326
                                                                                                                                                                                                                                306
                                                                                                                                                                                  257
                                                                                                                                                                                                                                                                                317
                                                                                                                                                                                                                                                                                               286 AsnPheLeuGlyGlnLeuLeuAspTyrGluLysLysIleLysAsnGlnThrGlyAlaSer 305
                                                                                                                                                                                                                                                                                                                                                                                            266 SerLeuAspGluAlaTyrArgPheValLysGluLysArgProThrIleSerProAsnPhe 285
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          437
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         246 AlaGlyIleSerArgSerAlaThrIleAlaIleAlaTyrIleMetLyBArgMetAspMet
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          365 SerValGlnProSerLeuLeuGluAspSerProLeuVal
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    48 AGCGTGCAGCCGTCGCTGTTAGAGGACAGCCCGCTGGTA
ThrSerGluAlaAlaGlyGlnArgProValHisProAlaSerValProSerValProSer
                                                                         GTCTCAGAGGGTGGACAGAAAAGCGAGACGCCCTCAGTCCACCCTGTGCCGACTCTGCT
                                                                                                              ValSerGluGlyGlyGlnLysSerGluThrProLeuSerProProCysAlaAspSerAla
                                                                                                                                                                                               GlyProLysSerLysLeuLysLeuLeuHisLeuGluLysProAsnGluProValProAla 325
                                                                                                                                                                      GGGCCAAAGAGCAAACTCAAGCTGCTGCACCTGGAGAAGCCAAAATGAACCTGTCCCTGCT
                                                                                                                                                                                                                                                                AATTTTCTGGGCCAACTCCTGGACTATGAGAAGAATTAAGAACCAGACTGGAGCATCA
                                                                                                                                                                                                                                                                                                                                                                                                                                                             GTGGGATCTCCCGCTACCATCGCTATCGCCTACATCATGAGAGAGGATGGACATG
                                                                                                                                                                                                                                                                                                                                                              TCTTTAGATGAAGCTTACAGATTTGTGAAAGAAAAAAAGACCTACTATATCTCCAAACTTC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.3e-122
132.00
100.00%
100.00%
19.85%
18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Length:
Matches:
Conservative:
Mismatches:
Indels:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     132
0
0
0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    10
                                                                                                                                                                        198
                              365
                                                                           138
                                                                                                                                                                                                                                                                   258
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           265
                                                                                                                                                                                                                                                                                                                                                                                                                                                             378
```

mis ruge Blank (uspto)